

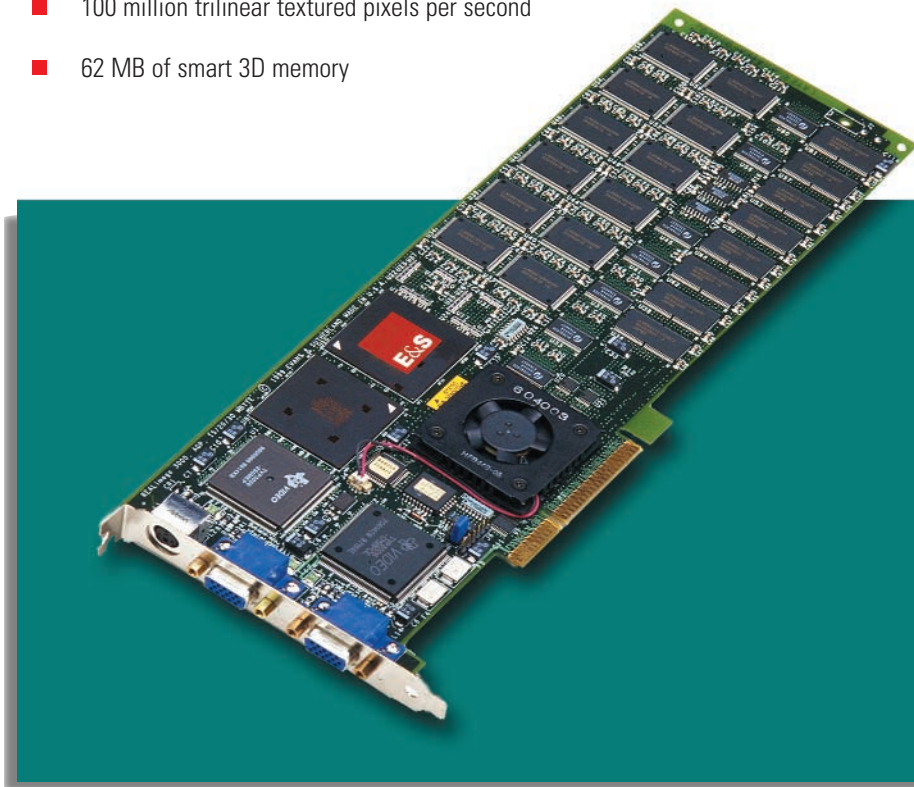


EVANS & SUTHERLAND

E&S Tornado 3000™

Full-Featured, High Performance 3D Solution for Creative Professionals

- DYNAMICgeometry™ for scalable performance
- REALimage™ 3000 technology
- Dual screens at true color
- Support for stereo viewing
- Up to 1920 x 1200 resolution at true color
- Highest quality, full-speed antialiasing and transparency
- Up to 5 million triangles per second
- 100 million trilinear textured pixels per second
- 62 MB of smart 3D memory



3D with a REAL difference™

technical data





E&S Tornado 3000™

E&S Tornado 3000™ Specifications

GRAPHIC FEATURES AVAILABLE SIMULTANEOUSLY

- Gouraud shading
- Alpha blending for transparency
- High-quality antialiasing
- Texture:
 - Bilinear, trilinear filtering
 - Perspective correction
 - MIP mapping
- Per pixel depth cueing
- Transparency, fog, overlays, and stencils

SOFTWARE SUPPORT

- OpenGL®
- Microsoft Windows NT® 4.0
- DX 6 on Windows 2000

GRAPHICS PERFORMANCE^{1,2}

- 3D vectors³ 5M per second
- 3D triangles⁴ 5M per second
- Texture fill rate 100M pixels/sec

HARDWARE FEATURES

- E&S REALimage™ 3000 technology
- Built-in VGA support
- 8-bit, double-buffered overlay or alpha
- Stencil planes (4-bit)
- Window IDs (4-bit)
- AGP 2X interface

1 All performance rates are with 1280 x 1024 resolution @85Hz, and 24-bit truecolor.
 2 Performance may vary by CPU and bus implementation.
 3 3D vectors are 10 pixels, antialiased with 16-subpixel positioning accuracy.
 4 3D triangles are Gouraud-shaded, textured, alpha-blended, and Z-buffered.

Evans & Sutherland
US: 1-408-546-2100
Europe: +44-1905-726782
Japan: +81-3-5325-3077
All Others: 1-408-546-2100

TOTAL MEMORY

- 30MB 3DRAM (frame & local buffer)
- 32MB CDRAM (texture)

SYSTEM REQUIREMENTS

- 100% IBM-compatible PC with an Intel Pentium®II or Pentium®III processor
- One available AGP slot (may require one adjacent PCI slot to guarantee power availability)
- Power consumption <38W



SERVICE AND SUPPORT

- High-quality technical support via a select group of VARs and system manufacturers
- Direct support line
- Web site for access to software driver updates and technical support

COMPATIBILITY

- UL 1950. Certified FCC Class B. CE Mark

WARRANTY

- Three years (parts and labor)

SUPPORTED DISPLAY MODES

Single-screen modes

Resolution	Color Depth	Z-buffer	Texture Memory	Refresh Rate Hz
640 x 480	24-bit	24-bit	32 MB	72, 75, 85, 120
800 x 600	24-bit	24-bit	32 MB	60, 75, 85, 120
1024 x 768	24-bit	24-bit	32 MB	60, 75, 85, 120
1280 x 1024	24-bit	24-bit	32 MB	60, 75, 85, 120
1600 x 1024	24-bit	24-bit	32 MB	60, 85
1600 x 1200	24-bit	24-bit	32 MB	60, 85
1920 x 1080	24-bit	24-bit	32 MB	72
1920 x 1200	24-bit	24-bit	32 MB	76

Stereo modes

Resolution	Color Depth	Z-buffer	Texture Memory	Refresh Rate Hz
1024 x 768	24-bit	24-bit	32 MB	120 (60 Hz per screen)
1280 x 1024	24-bit	24-bit	32 MB	120 (60 Hz per screen)

Dual-screen modes

Resolution	Color Depth	Z-buffer	Texture Memory	Refresh Rate Hz
2048 x 768 (1024 x 768 per screen)	24-bit	24-bit	32 MB	60, 75, 85, 120
2560 x 1024 (1280 x 1024 per screen)	24-bit	24-bit	32 MB	60, 75, 85

For more information, visit our website at www.es.com/wg.