Introducing s3's Savage3DTM, the world's first integrated 128-bit 2D/3D graphics, MPEG-2 video accelerator with S3 Texture Compression (S3TCCTM[™]) and single-cycle trilinear filtering. Savage3D is designed for performance with a floating point triangle setup engine, optimized for AGP-2X execute mode, and true color rendering.

LIT

TTTT

X.X.X.X.X.X.Y.

1.1.2.1.1.1.1.

.1.1.1.

1.1.1.1.1.

.I.V. ol al al al a



Just don't get hurt!



Combining the industry's fastest 3D rendering engine with a highly advanced DVD playback engine and lightning fast 2D graphics performance, S3's Savage3D delivers a new level of multi-media acceleration for the high-end PC market.



Incoming courtesy of Rage, Inc.



Expendable courtesy of Rage, Inc.

Features:

- Floating point triangle setup engine
- Single cycle trilinear filtering
- Optimized for full AGP-2X, including DMA and execute modes
- 128-bit engine with dual rendering pipelines
- Industry standard
 S3 Texture Compression
- True color rendering
- Full speed DVD video playback
- Performance:
- 125M pixels/sec trilinear fill rate
- 5M triangles/second peak
- S3 Texture Compression delivers 6X the amount of textures

High Performance 3D Acceleration:

- Floating point triangle setup engine
- Single-cycle 3D architecture
- 128-bit with dual rendering pipelines
- 5M triangles/second peak
- 125M pixels/sec trilinear fill rate
- Full AGP-2X implementation

3D Rendering Features:

- · Single-cycle trilinear filtering
- S3 Texture Compression
- True color rendering
- · Void and cluster dithering for 16-bit modes
- · Specular lighting and diffuse shading
- · Alpha blending modes
- · Multiple textures
- · Edge anti-aliasing
- · Vertex and table FOG
- 16 or 24-bit Z-buffering
- MPEG-2 video textures
- Hardware-assisted bump mapping and anisotrophic filtering
- Special effects such as Sprite Anti-Aliasing, reflection and enviroment mapping, texture morphing, shadows, procedural textures and atmospheric effects





The single-cycle trilinear filtering enables the highest 3D graphics performance along with stunning image quality. Savage 3D is the first 3D accelerator to utilize the S3TC™, which was selected by Microsoft as the standard compression technique.





Riot courtesy of Monolith Productions



Riot courtesy of Monolith Productions



2D Acceleration Features:

- Highly Optimized 128-bit graphics engine
- Full featured 2D rasterizer for acceleration of bitblt, line draw, rectangle fill, panning and HW cursor
- 8, 16, and 32-bpp mode acceleration
- · Multi-monitor support

High Speed Memory Interface:

- 125MHz SDR SGRAM or SDRAM
- · 64-bit synchronous memory bus
- 2, 4, or 8MB frame buffer
- SO-DIMM memory upgrade
- 512Kx32K or 256Kx32K parts
- · Block write support

High Definition Video Output Ready:

- · High quality front end up/down scalar
- · Planar to packed format conversion
- Hardware subpicture blending and highlights
- Motion compensation for full speed DVD video playback
- Supports multiple video windows for video conferencing
- Brightness, hue, and saturation controls
- 60MHz VIP video port supports HD0 input resolutions

High Quality TV Out:

- Integrated NTSC/PAL encoder
- Macrovision® 7.1 support
- Programmable flicker filter and vertical overscan compensation
- Simultaneous CRT and TV display

General Features:

- 250MHz RAMDAC with gamma correction
- I²c serial communications bus and flash ROM support
- PCI power management registers
- Hardware and BIOS support for VESA timings and DDC monitor communications
- PCI 2.1 support with full bus mastering

Package Details:

- 27x27mm PBGA with 336 balls
- 2.5V Core with 3.3V/5V tolerant I/O

Full Software Support:

- Windows 95 and 98 display drivers
- Windows NT 3.5, 4.0, and 5.0 display drivers
- Windows 3.X and OS2[®] 2.1/3.0 display drivers
- Direct 3D, DirectDraw and ActiveX
- OpenGL ICD for Windows 9X and NT
- Comprehension SDK, Utilities
 and ISV Tools
- ISV Marketing and bundling Programs

S3 Incorporated

2801 Mission College Boulevard P.O. Box 58058 Santa Clara, California 95052-8058 408.588.8000 phone 408.980.5444 fax www.s3.com website

