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## QuickDraw 3D Accelerator Card: Specifications (10/96)

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TOPIC -----

This article provides the specifications of the QuickDraw 3D Accelerator Card for Power Macintosh computers with PCI slots.

DISCUSSION -----

### Memory

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- 128K SRAM cache
- 512K of high-speed SRAM texture memory, for up to 12 texture maps
- Does not include frame buffer ASICs
- Includes two custom ASICs. Rendering engine is based on state-of-the-art 0.5 $\mu$  technology

### Acceleration capabilities

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- Accelerates QuickDraw 3D rendering to speeds as high as 12 times faster
- Renders 10 million trilinearly filtered, mipmapped texture pixels per second
- Renders up to 120,000 triangles per second
- Accelerates Gouraud shading, texture mapping, transparency, and Constructive Solid Geometry (CSG)
- Continually enables trilinear filtering, and mipmapping diffuse and specular lighting producing very high quality texture mapped images
- Uses high-performance SRAM memory to display up to 12 texture maps in each open window
- Outputs an alpha channel, making it fast and easy to transfer images between applications
- Offers hardware-accelerated per-pixel Z sorting for precise rendering of transparent surfaces or CSG, regardless of submission order or interpenetration
- A single card accelerates 3D rendering to all frame buffers in the system. This means it accelerates rendering on multiple monitors.

### Environmental requirements

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- Operating temperature: 50° to 104° F (10° to 40° C)
- Humidity: 20% to 95% noncondensing

Standards compliance/agency approvals

- PCI 2.1 compliant, IEEE 802.5 and 802.2

System requirements

- An Apple Power Macintosh computer with PCI slots or another PCI-equipped computer running the Mac OS
- Macintosh system software version 7.5.2 or later; System Enabler 1.1 or later
- At least 16 MB of RAM
- A hard disk drive
- A CD-ROM drive for installing software

Software and demos included on CD-ROM

- QuickDraw 3D 1.03 Installer and Demo Files - The installer will be localized in the following languages: English, French, German, Spanish, Italian, Japanese, Dutch, and Swedish.
- Apple QD3D HW Driver
- Apple QD3D HW Plug-In (Driver)
- ReadMe file
- Demos folder - In the Demos folder are the following third party and Apple-developed demos:
  - TextureEyes, a live-video mapping 3D application with models and movies
  - MoviePlayer 2.1
  - Havoc, a 3D game demo from Reality Bytes
  - Models, textures, and product catalog from Specular International
  - Models from ViewPoint Datalabs

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22 Oct 1996 - Added keyword and reformatted.

27 Oct 1995 - Changed distribution status.

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