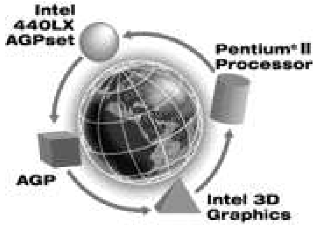
Accelerated Graphics Port AGP



It's High Performance 3D... It's Interactive, Full-Motion Video.. it's Coming Soon to the Excitin Pentium® II Processor-Based Systems and Hot New Software Titles that PC Users will be Clamoring for Next Year.

The Accelerated Graphics Port (AGP new data super-highway on the PC platform for 3D graphics and full-mo video. As a new interconnect for grap accelerators on Pentium II processor-based systems, AGP blasts rich 3D and video to the PC's displa

Now PC users can experience the type of dazzling 3D graphics and video previously found only on workstations costing $20,000 or more! Intel now the Accelerated Graphics Port solutions that will enable OEMs to deliver f compelling and lifelike 3D and video performance in their next PC design.

Intel's implementation of AGP is optimized to achieve ultimate performan from the most powerful processor we have ever created, the Pentium II processor with its Dual Independent Bus (DIB) architecture.

The Path to the Visual Connected PC Starts with AGP

Compelling 3D and interactive full-motion video were once reserved for high-end computers costing tens of thousands or more. Today's combinati Intel AGPsets, such as the new 440LX AGPset, with the Pentium II proces rapidly bringing lifelike 3D and full-motion video within the reach of mainstream PC users.

It's a breakthrough innovation from Intel that promises to evolve PC architecture from today's bandwidth-limited PCI-based systems to the pow and performance of the Visual Connected PC. The time to make it happen i now.

Your next PC design can deliver the performance needed for arcade-qualit graphics, interactive 3D reference titles, interactive video, advanced CAD/CAM solid modeling applications, breathtaking 3D data visualizatio hot new 3D VRML applications for home and business.

The Problem

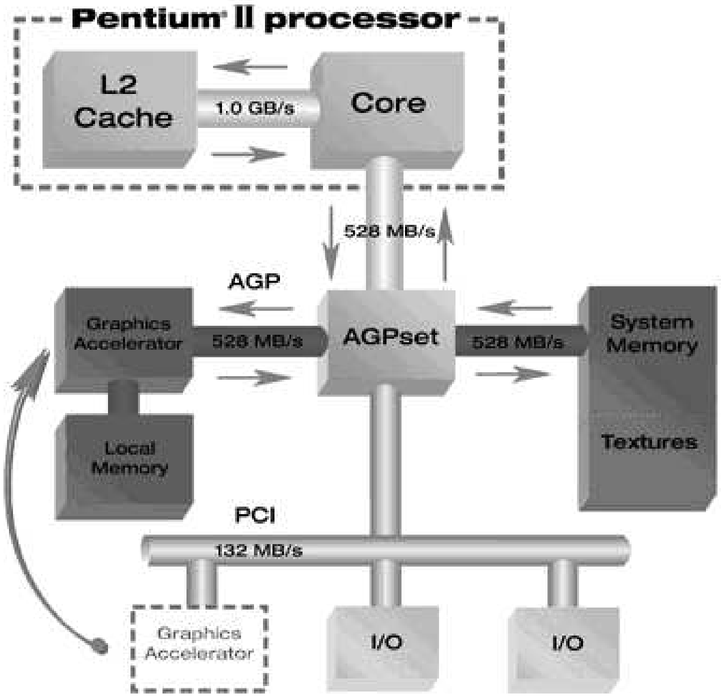
Emerging 3D graphics applications impose a host of rigorous requirements the PC platform, including faster geometry calculations, more sophisticatec rendering, and more detailed texturing. But while the Pentium II processor well suited to handle increased geometry rates, and the next generation of graphics controllers can support a wide variety of rendering effects, coping the growing size of texture maps has become a severe problem.

One problem is the size of local video memory used by graphics controller: Typically this memory is in the range of 2 to 4 Mbytes. However, 3D applications that use in excess of 20 Mbytes for a single texture map are beginning to appear. Video memory could be expanded to accomodate thes demands, but such a solution is terribly expensive and not scalable.

A second issue is the bandwidth supported by the PCI bus. Graphics contrc need to pre-fetch texture maps from system memory into their local RAM. texture maps have grown in size, the PCI bus has begun to become a bottleneck. The problem is even more acute for applications that involve full-motion video. Add to this the explosion of new high-speed devices tha attach to the PCI bus, such as Ultra DMA drives and 100 Mb/s LAN adapte and its easy to see how congested the PCI bus is becoming.

The Solution: AGP

Accelerated Graphics Port technology improves system performance by providing a high-speed pathway between the PC’s graphics controller and system memory. This pathway enables the graphics controller to execute texture maps directly from system memory rather that caching them in its limited local video memory. It also helps speed the flow of decoded video the CPU to the graphics controller.



The advantages are many:

- Texture maps of unlimited size, detail, and realism can be employed- the AGP Demo for an example of how much better 3D graphics get v AGP.
- 3D applications will also run faster when the need to pre-fetch and ca textures in local video memory is eliminated. How much faster? Up t 12.6 times more frames per second, according to the latest Ziff-Davis WinBench* 97 performance comparisons.
- By minimizing the need for video memory, AGP helps OEMs contro costs of new PC designs.
- Video traffic will fly seamlessly across the AGP bus to the user's scr
- Systems will have more stability when bandwidth-intensive graphics video traffic is removed from the PCI bus.

And only Intel's implementation of AGP with the Pentium II processor anc 440LX AGPset can deliver on these benefits in your next PC.

How to Learn More About AGP

First, take few moments to explore AGP technology in our AGP Tutorial. I outlines everything you need to know about PCs and software applications optimized for AGP. Hardware developers who wish to dig even deeper can download the AGP Specification and the latest engineering revisions. Even more detailed information concerning electromechanical implementation is and thermal design guidelines is available in the recently updated AGP Platform Design Guide, Revision 1.1.

Then learn more about the building blocks of AGP now available from Inte including the 440LX AGPset and the Pentium II processor with Dual Independent Bus architecture. Only systems based on Intel's Pentium II

processor can deliver solutions optimized for AGP. If you are already desig
a Pentium II processor-based system, find out about the benefits of adding
capabilities to your design.

Finally, check out the AGP Implementors Forum Web site to get the latest
technical insights on AGP. With more than 130 members, the AGP
Implementors Forum is an incredible resource for companies looking to bu
AGP-powered products.

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