



Intel® Graphics Media Accelerator 900

Get more enjoyment from your PC!

Intel® Graphics technology is the #1 choice of personal computer buyers around the world.¹ Intel has engineered a powerful, feature-rich graphics solution right into the heart of your system—the chipset—so you get exceptional visual capabilities at lower costs. And with Intel quality and validation, the chipset can help your system run smoothly, while providing an incredible graphics experience.



More Capability, More Fun

Intel® Graphics Media Accelerator (GMA) 900 graphics delivers new levels of performance, so you can use your PC for new levels of family fun. It features support for the latest LCD and wide-screen displays, as well as hardware acceleration for Microsoft DirectX® 9. Chat with friends and family, learn more through rich digital libraries, play games with people around the world—and enjoy your computer to the fullest.

Playing With Media

With today's PCs, you can store, deliver and display video, music and photos more easily than ever. Intel® GMA 900 graphics is designed to provide outstanding visual quality and color. New features, such as support for High-Definition TV (HDTV) and dynamic modes, allow your PC to connect to a wide variety of displays for a whole new media playback experience. Whether you develop the content on your own or tap into the rich content available on the internet, your PC can become a window into a rich new world of media capabilities.

Modern Visual Engine

The Intel GMA 900 graphics core supports the needs of PC buyers by providing the features and performance required for emerging applications, while maximizing the use of system resources. This third-generation architecture takes the capabilities and performance of integrated graphics to new levels of throughput. A faster core and increased memory bandwidth improve overall performance, and hardware acceleration for Microsoft DirectX 9 improves 3D performance. Optimizations for DirectDraw* and new display modes deliver a better media viewing experience.



Optimal Use of System Resources

Graphics require dedicated memory and processing, and applications have divergent memory needs. Some applications, such as e-mail and

Internet browsing, require very little graphics memory. Others, such as games, require more. Intel GMA 900 graphics supports both of these demand levels through a unique intelligent memory management scheme called Dynamic Video Memory Technology (DVMT). DVMT handles these diverse applications by providing the maximum availability of system memory for general computer usage, while supplying additional graphics memory when a 3D-intensive application requests it.

The Intel GMA 900 graphics architecture also takes advantage of the high-performance Intel processor installed in your system. Many computer graphics operations can be handled by the system processor, providing an optimal blend of performance and cost.

Advanced Display Technology

Intel GMA 900 graphics is Intel's first desktop platform to support Dual Independent Display technology. This capability allows two separate displays to be connected to the system at the same time. One way to use this capability is to create a larger desktop work surface spanning multiple displays. Applications can be moved from one monitor to another, or can be displayed on more than one monitor simultaneously. Another example of this feature is playing digital media on one display, while using chat or e-mail on the other.

Specifications

Third-generation Graphics Core

- 256-bit graphics core
- 8/16/32 bpp
- Up to 8.5 GB/sec memory bandwidth
- 1.3 GP/sec and 1.3 GT/sec fill rate
- 224MB maximum video memory
- 2048x1536 at 85 Hz maximum resolution
- Dynamic Display Modes for flat-panel and wide-screen support
- Operating systems supported: Microsoft Windows* XP, Windows 2000, Linux-compatible (Xfree86 source available)

High-performance 3D

- Up to 4 pixels per clock rendering
- Microsoft DirectX* 9 Hardware Acceleration Features:
 - Pixel Shader 2.0
 - Volumetric Textures
 - Shadow Maps
 - Slope Scale Depth Bias
 - Two-Sided Stencil
- Microsoft DirectX* 9 Vertex Shader 2.0 and Transform and Lighting supported in software through highly optimized Processor Specific Geometry Pipeline (PSGP)
- DirectX Texture Decompression
- OpenGL* 1.4 support

Advanced Display Technology

- 400 MHz DAC frequency for up to 2048x1526 resolution for both analog and digital displays
- Two Serial Digital Video Out (SDVO) ports for flat-panel monitors and/or TV-out support via Advanced Digital Display 2 (ADD2) cards
- Multiple display types (LVDS, DVI-I, DVI-D, HDTV, TV-out, CRT) for dual monitor capabilities
- Hardware motion compensation support for DVD playback
- HDTV 720p and 1080i display resolution support
- 16x9 Aspect Ratio for wide screen displays

High Quality Media Support

- Up and Down Scaling of Video Content
- High Definition Content Decode
- 5x3 Overlay Filtering
- Hardware Motion Compensation support for DVD playback

For more information, visit the Intel Web site at: intel.com/graphics



¹ Source: Mercury Research Q32003 PC Graphics Report

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