Power Mac G4

Features

Blazing speed
- Dual 1-GHz PowerPC G4 processors or a single processor running at up to 933 MHz
- Integrated Velocity Engine vector processing unit for high-speed parallel processing
- Dedicated L3 cache with throughput up to 4GB per second (933-MHz and dual 1-GHz systems)
- UNIX-based core operating system that increases system stability and responsiveness
- Symmetric multiprocessing to take full advantage of dual processor systems

Next-generation graphics
- Ultrafast AGP graphics cards from NVIDIA and ATI for stunning 3D capabilities
- Optional NVIDIA GeForce4 Ti card for the ultimate in 3D graphics technology
- Dual display support for connecting two displays from a single graphics card
- Mac OS X for superior 2D, 3D, and video graphics, plus built-in font management, PDF imaging, and ColorSync

Ultimate expansion and connectivity
- Four PCI slots with throughput of up to 215 MBps
- Memory expansion up to 1.5GB
- Support for up to three internal hard drives
- Two FireWire ports and four USB ports for connecting professional digital devices
- Gigabit Ethernet for high-speed networking

Power to burn
- SuperDrive (DVD-R/CD-RW) or CD-RW drive
- Data DVD and CD burning for up to 4.7GB of data on a single optical disc
- iDVD and iTunes software for authoring video DVDs and audio CDs quickly and easily

Breakthrough applications
- Suite of powerful, easy-to-use Apple software for working with your movies, music, and pictures
- Optional Final Cut Pro and DVD Studio Pro software for professional DV editing and DVD authoring
- Thousands of available applications that benefit from the advanced features of Mac OS X

The new Power Mac G4 is a digital powerhouse designed to accelerate your workflow like never before. With more processing power and next-generation graphics capabilities, it’s the ultimate tool for fast-thinking creative and scientific professionals who need a computer that keeps pace with their ideas.

Apple has taken the fastest PowerPC G4 processor ever created—and then doubled it—to introduce the phenomenal new dual 1-GHz Power Mac G4. Add Velocity Engine vector processing technology, an ultraefficient system architecture, and the UNIX-based power and stability of Mac OS X, and it’s no wonder that the Power Mac G4 outperforms even the fastest Pentium-based systems.

We’ve raised the bar on graphics performance as well, with powerful all-new graphics processors and dual display support across the line! The ATI Radeon 7500 and NVIDIA GeForce4 MX deliver high-resolution graphics processing capabilities for dazzling 3D images with unprecedented detail; fast, fluid motion; and photorealistic textures. For the ultimate graphics experience, configure your Power Mac G4 with the NVIDIA GeForce4 Ti. Featuring 128MB of Double Data Rate (DDR) memory and capable of a staggering 4.9 billion textured pixels per second, this incredible new card is the fastest graphics processing unit on the planet.

Massive expandability and easy connectivity let you customize your Power Mac to suit your workflow. Use the four high-performance PCI slots to add video, audio, SCSI, and other specialized capabilities, and the extra drive bays and RAM slots to extend the system’s storage and memory. Built-in Gigabit Ethernet, FireWire, and USB provide easy connectivity to high-speed networks and professional devices, including cameras, audio components, and media servers.

Whatever work you do, the SuperDrive and Apple’s innovative software make it easy to produce, share, and archive your projects on CDs and DVDs. With Apple iDVD software, you can turn video and pictures into DVD-based sales materials, educational resources, or digital portfolios that play on most consumer players. Or burn data DVDs and CDs right from your Mac OS X desktop to store up to 4.7GB of data on a single optical disc.

All the advanced Power Mac G4 capabilities come together seamlessly in Mac OS X. Thousands of great applications are already available to take full advantage of this powerful new operating system, which delivers bulletproof reliability, improved system performance, and leading-edge technologies for 2D, 3D, and video graphics. Check out Final Cut Pro for professional digital video editing and other leading software titles from Adobe, Macromedia, and Microsoft. No matter what you’re working on, the exceptional new Power Mac G4 is designed to help you do more, faster—giving you what you need most: more time.
Power Mac G4

System Pentium system

Blister performance advantage of dual processors.

DVD video encoding performance.

Operations.

Photoshop performance of 9 commonly used 47 percent faster than PCs with a 2.2-GHz Pentium 4 processor in Photoshop tests of 9 commonly used operations.

Final cut pro 3 performance.

Memory.

• 256MB or 512MB of PC133 SDRAM
• Three DIMM slots supporting up to 1.5GB of PC133 SDRAM using the following:
  — 128MB or 256MB DIMMS (64-bit-wide, 128-Mbit)
  — 512MB DIMMs (64-bit-wide, 256-Mbit)

Storage.

• One of the following hard disk drives:
  — 40GB 7200-rpm Ultra ATA
  — 60GB 7200-rpm Ultra ATA
  — 80GB 7200-rpm Ultra ATA
• One of the following optical drives:
  — CD-RW drive (writes CD-R discs at 24x speed, writes CD-RW discs at 10x speed, reads CDs at 32x speed)
  — SuperDrive (combination DVD-R/CD-RW drive; writes DVD-R discs at 2x speed, reads DVDs at 6x speed, writes CD-R discs at 8x speed, writes CD-RW discs at 4x speed, reads CDs at 24x speed)
  — DVD-ROM/CD-RW Combo drive (build-to-order option; reads DVDs at 8x speed, writes CD-R discs at 12x speed, writes CD-RW discs at 8x speed, reads CDs at 32x speed)
  — Three 3.5-inch hard drive expansion bays
  — One ATA drive preinstalled on standard configurations
  — Support for up to two internal ATA drives
  — Support for up to three internal SCSI drives
  — Support for a combination of internal SCSI and ATA drives

Graphics support.

• One of the following graphics cards, installed in a dedicated AGP 4X graphics slot:
  — ATI Radeon 7500 graphics card with 32MB of DDR SDRAM and ADC and VGA connectors; supports digital resolutions up to 1920 by 1200 pixels and analog resolutions up to 2048 by 1536 pixels
  — NVIDIA GeForce4 MX graphics card with 64MB of DDR SDRAM and ADC and VGA connectors; supports digital and analog resolutions up to 1920 by 1200 pixels
  — NVIDIA GeForce4 Ti graphics card with 128MB of DDR SDRAM and ADC and DVI connectors (build-to-order option); supports digital and analog resolutions up to 2048 by 1536 pixels

Power Mac G4

System Pentium system

Dell Dimension 8200

2.2-GHz Pentium 4 (with Linux) Baseline

The dual 1-GHz Power Mac G4 running A/G BLAST, the popular open-source biotechnology tool, delivers five times the performance of a PC with a 2-GHz Pentium 4 processor running NCBI BLAST (based on common searches with word size of 40).

Longer bars indicate better performance.

Technical specifications

Processor.

• 800- or 933-MHz PowerPC G4 processor or dual 1-GHz PowerPC G4 processors
• Velocity Engine vector processing unit
• Full 128-bit internal memory data paths
• Powerful floating-point unit supporting single-cycle, double-precision calculations
• Data stream prefetching operations supporting four simultaneous 32-bit data streams
• 256K on-chip L2 cache running at processor speed
• 2MB DDR SDRAM L3 cache per processor, with up to 4GB per second throughput (933-MHz and dual 1-GHz systems)
• 133-MHz system bus supporting over 1-GBps data throughput

Memory.

• 256MB or 512MB of PC133 SDRAM
• Three DIMM slots supporting up to 1.5GB of PC133 SDRAM using the following:
  — 128MB or 256MB DIMMS (64-bit-wide, 128-Mbit)
  — 512MB DIMMs (64-bit-wide, 256-Mbit)

Storage.

• One of the following hard disk drives:
  — 40GB 7200-rpm Ultra ATA
  — 60GB 7200-rpm Ultra ATA
  — 80GB 7200-rpm Ultra ATA
• One of the following optical drives:
  — CD-RW drive (writes CD-R discs at 24x speed, writes CD-RW discs at 10x speed, reads CDs at 32x speed)
  — SuperDrive (combination DVD-R/CD-RW drive; writes DVD-R discs at 2x speed, reads DVDs at 6x speed, writes CD-R discs at 8x speed, writes CD-RW discs at 4x speed, reads CDs at 24x speed)
  — DVD-ROM/CD-RW Combo drive (build-to-order option; reads DVDs at 8x speed, writes CD-R discs at 12x speed, writes CD-RW discs at 8x speed, reads CDs at 32x speed)
  — Three 3.5-inch hard drive expansion bays
  — One ATA drive preinstalled on standard configurations
  — Support for up to two internal ATA drives
  — Support for up to three internal SCSI drives
  — Support for a combination of internal SCSI and ATA drives

Graphics support.

• One of the following graphics cards, installed in a dedicated AGP 4X graphics slot:
  — ATI Radeon 7500 graphics card with 32MB of DDR SDRAM and ADC and VGA connectors; supports digital resolutions up to 1920 by 1200 pixels and analog resolutions up to 2048 by 1536 pixels
  — NVIDIA GeForce4 MX graphics card with 64MB of DDR SDRAM and ADC and VGA connectors; supports digital and analog resolutions up to 1920 by 1200 pixels
  — NVIDIA GeForce4 Ti graphics card with 128MB of DDR SDRAM and ADC and DVI connectors (build-to-order option); supports digital and analog resolutions up to 2048 by 1536 pixels

Expansion.

• Four open full-length 64-bit, 33-MHz PCI slots
• One AGP 4X slot with graphics card installed
• Two 400-Mbps FireWire ports (15W total power)
• Four USB ports (two on system, two on keyboard)

Communications.

• 10/100/100BASE-T Ethernet connector (F-J-45)
• Built-in 56K V.90 modem
• Ready for wireless networking: Built-in antennas and card slot for optional 11-Mbps AirPort Card; IEEE 802.11b compliant

Audio.

• Built-in speaker
• Apple speaker minijack for connection to Apple Pro Speakers
• Optional Apple Pro Speakers
• Headphone/line out minijack
• Support for external third-party USB digital audio peripherals such as microphones, speakers, and MIDI devices

Keyboard and mouse.

• Apple Pro Keyboard
• Apple Pro Mouse

Electrical requirements and agency approvals.

• Line voltage: 115V AC (90V to 132V AC) or 230V AC (160V to 264V AC)
• Frequency: 47 to 63 Hz, single phase
• Maximum continuous power: 360W
• Meets ENERGY STAR requirements

Environmental requirements.

• Operating temperature: 50° to 95° F (10° to 35° C)
• Storage temperature: -40° to 116° F (-40° to 47° C)
• Relative humidity: 5% to 95% noncondensing
• Maximum altitude: 10,000 feet

Size and weight.

• Height: 17.0 inches (43.2 cm)
• Width: 8.9 inches (22.6 cm)
• Depth: 18.4 inches (46.7 cm)
• Weight: 30 pounds (13.6 kg)
Configurations

<table>
<thead>
<tr>
<th>Order no.</th>
<th>M8705LL/A</th>
<th>M8666LL/A</th>
<th>M8667LL/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor</td>
<td>800-MHz PowerPC G4</td>
<td>933-MHz PowerPC G4</td>
<td>Dual 1-GHz PowerPC G4</td>
</tr>
<tr>
<td>On-chip cache</td>
<td>256K L2 at 800 MHz</td>
<td>256K L2 at 933 MHz</td>
<td>256K L2 at 1 GHz per processor</td>
</tr>
<tr>
<td>L3 cache (DDR SDRAM)</td>
<td>—</td>
<td>2MB with 3.7-GHz throughput</td>
<td>2MB per processor with 4-GHz throughput</td>
</tr>
<tr>
<td>Main memory (PC133 SDRAM)</td>
<td>256MB</td>
<td>256MB</td>
<td>512MB</td>
</tr>
<tr>
<td>Hard disk drive</td>
<td>40GB (7200 rpm)</td>
<td>60GB (7200 rpm)</td>
<td>80GB (7200 rpm)</td>
</tr>
<tr>
<td>Graphics support</td>
<td>ATI Radeon 7500 with 32MB of DDR SDRAM</td>
<td>NVIDIA GeForce4 MX with 64MB of DDR SDRAM</td>
<td>NVIDIA GeForce4 MX with 64MB of DDR SDRAM</td>
</tr>
<tr>
<td>Optical drive</td>
<td>CD-RW</td>
<td>SuperDrive (DVD-R/CD-RW)</td>
<td>SuperDrive (DVD-R/CD-RW)</td>
</tr>
<tr>
<td>FireWire</td>
<td>Two ports</td>
<td>Two ports</td>
<td>Two ports</td>
</tr>
<tr>
<td>USB</td>
<td>Four ports</td>
<td>Four ports</td>
<td>Four ports</td>
</tr>
<tr>
<td>PCI</td>
<td>Four slots</td>
<td>Four slots</td>
<td>Four slots</td>
</tr>
<tr>
<td>Ethernet</td>
<td>10/100/1000BASE-T</td>
<td>10/100/1000BASE-T</td>
<td>10/100/1000BASE-T</td>
</tr>
<tr>
<td>Wireless networking</td>
<td>AirPort ready</td>
<td>AirPort ready</td>
<td>AirPort ready</td>
</tr>
<tr>
<td>Modem</td>
<td>56K</td>
<td>56K</td>
<td>56K</td>
</tr>
</tbody>
</table>

All models include Apple Pro Keyboard, Apple Pro Mouse, and modem cable; Mac OS X v10.1 and Mac OS 9.2; QuickTime, iMovie 2, DVD 2 (requires SuperDrive), iPhoto, iTunes 2, DVD Player, Mac OS X Mail, Microsoft Internet Explorer, EarthLink, Acrobat Reader 5.0, Art Director’s Toolkit, FAExt 10.0 Preview, FileMaker Pro 5.5 Trial, Graphic Converter, OmniGraffle, OmniOutliner, PCalc, PixelNhance, and Snapz Pro X; Apple Hardware Test CD; complete setup, learning, and reference documentation; limited warranty; and 30 days of free Internet service through EarthLink.

Internet access requires an Internet service account; fees may apply. Product contains electronic documentation. Backup copy of software is provided on CD-ROM.

Service and Support

Your Power Mac G4 comes with 90 days of telephone support and a one-year limited warranty. Purchase the AppleCare Protection Plan to extend your service and support to three full years. Only the AppleCare Protection Plan provides you with direct telephone support from Apple technical experts and the assurance that repairs will be handled by Apple-certified technicians using genuine Apple parts. For more information, visit www.apple.com/support/products or call 800-823-2775.

For More Information

For more information about this product or to find out where to buy Apple products, visit www.apple.com/hardware or call 800-538-9696.

Build-to-Order Options

Order a custom-configured computer from your authorized Apple reseller or the online Apple Store. Build-to-order options can include the following. For up-to-date information, visit www.apple.com/store or call 800-MY-APPLE.

- Processor: 800-MHz, 933-MHz, dual 1-GHz PowerPC G4
- Memory: 256MB, 512MB, 1GB, 1.5GB
- Hard disk drives: 40GB Ultra ATA (7200 rpm), 60GB Ultra ATA (7200 rpm), 80GB Ultra ATA (7200 rpm), 36GB Ultra160 SCSI (10,000 rpm), 72GB Ultra160 SCSI (10,000 rpm)
- Graphics: ATI Radeon 7500 with 32MB of DDR SDRAM, NVIDIA GeForce4 MX with 64MB of DDR SDRAM, NVIDIA GeForce4 Ti with 128MB of DDR SDRAM
- Audio: Apple Pro Speakers, Apple iPod, Harman Kardon Sub, Harman Kardon SoundSticks
- Other: AirPort Card, AirPort Base Station, DVI-to-ADC adapter, Zip 250 drive, Ultra SCSI PCI card, Ultra160 SCSI PCI card

Apple Displays

- Apple Studio Display (15-inch flat panel); M7928ZM/A
- Apple Studio Display (17-inch flat panel); M7649ZM/A
- Apple Cinema Display (22-inch flat panel); M8058ZM/A

1 The ATI Radeon 7500 and NVIDIA GeForce4 MX cards support one ADC display and one VGA display simultaneously. The NVIDIA GeForce4 Ti supports one ADC display and one DVI or VGA display simultaneously.
2 999MB maximum per application in Mac OS 9.
3 Only CD and DVD audio is supported.
4 Based on Photoshop, iPhoto, and iMovie performance.
5 1GB = 1 billion bytes; actual formatted capacity less.

© 2002 Apple Computer, Inc. All rights reserved. Apple, the Apple logo, AirPort, Apple Cinema Display, Apple Store, Apple Studio Display, ColorSync, Final Cut Pro, FireWire, Mac, Macintosh, and QuickTime are trademarks of Apple Computer, Inc., registered in the U.S. and other countries. DVD Studio Pro, iMovie, iPod, PowerMac, PowerPC, and QuickTime are trademarks of Apple Computer, Inc. AppleCare is a service mark of Apple Computer, Inc., registered in the U.S. and other countries. Adobe is a trademark or registered trademark of Adobe Systems Incorporated in the U.S. and/or other countries. ENERGY STAR is a U.S. registered mark. PowerPC is a trademark of International Business Machines Corporation, used under license therefrom. Other product and company names mentioned herein may be trademarks of their respective companies. Product specifications are subject to change without notice.