



Power Mac G4

Buckle up—the Power Mac G4 is here. It features the revolutionary PowerPC G4 with Velocity Engine, which crunches multimedia data at blazing-fast speeds. The Velocity Engine uses true independent vector processing—a technology originally developed for use in scientific supercomputers. It gives you the power you need to create and manipulate even the most complex graphics files. The result is unprecedented productivity for creative professionals—in the arts as well as the sciences.





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Features

Superior performance

- PowerPC G4 processor running at up to 500 megahertz and featuring Velocity Engine advanced vector processing technology
- 1 megabyte of backside level 2 cache running at half the processor speed
- Built-in 10/100BASE-T Ethernet networking
- ATI RAGE 128 graphics card with 16MB of graphics memory

Maximum expansion

- Support for up to 1.5 gigabytes of high-performance PC100 SDRAM²
- Four expansion slots, including three 64-bit PCI slots and one dedicated graphics card slot (either a 66-megahertz PCI slot or an AGP 2X slot)
- Support for more than 100 gigabytes of internal hard disk storage
- Two or three 400-megabit-per-second FireWire ports for connecting up to 63 devices, including digital video cameras, hard disk drives, and high-speed multimedia peripherals
- Two Universal Serial Bus (USB) ports for connecting up to 127 peripherals

Elegant design

- "Instant access" side door makes it very easy to install cards, drives, and memory
- Built-in antenna and support for optional AirPort wireless networking (some configurations)⁴
- Convenient low-power sleep/wake feature that virtually eliminates the need to shut down the computer (some configurations)

Performance Comparison

For up-to-date benchmark information, visit www.apple.com/powermac on the World Wide Web.

¹In processor and Photoshop tests.

²999MB maximum per application.

³Optional AirPort Card available for some configurations.

⁴Available for some models; see Available Configurations chart on page 4.

Apple designed the new Power Mac G4 for creative professionals who use computers as the pivotal tool of their trade, setting the pace of their work, their productivity, even their success. With its Pentium-crushing speed and convention-crushing design, the Power Mac G4 picks up where the best-selling Power Macintosh G3 left off. It's simply the fastest desktop computer ever, easily running up to a stunning 100% to 200% faster than the fastest Pentium III-based PCs.¹ The Power Mac G4 is so powerful that its speed is measured in gigaflops, or billions of floating-point operations per second, just like supercomputers.

At the heart of this system is the brand-new PowerPC G4 with Velocity Engine. Using vector processing, the PowerPC G4 brings supercomputer performance to the desktop for the first time. The Velocity Engine moves vector and multimedia data at superefficient speeds—it can process data in 128-bit chunks, instead of the smaller 32-bit or 64-bit chunks used in traditional processors. System performance is further enhanced through the use of an all-new, superfast system bus and 1 megabyte of backside cache.

Expansion is this computer's particular talent. It accommodates more than 100 gigabytes of hard disk storage and up to 1.5 gigabytes of SDRAM.² USB and FireWire ports let you connect to high-bandwidth peripherals such as printers, digital video cameras, hard disk drives, and more. Three 64-bit PCI slots, a feature that until recently was available only in high-end workstations, support a wide variety of expansion cards. Choose Apple's Final Cut Pro video editing software for flexible, highly productive video editing, compositing, and special effects.

When you're ready, get unwired with AirPort, Apple's new high-speed wireless local area network option.³ AirPort gives you the freedom to surf the Internet without cables, additional phone lines, or complicated networking hardware. Just install the AirPort wireless networking card, connect to an AirPort wireless network, and start surfing from your business, classroom, or any room in your home.

For all those who consider their desktop system a tool for expressing their creative abilities, there's finally a computer that can keep up with everything their minds can imagine—as quickly as they can imagine it. Power Mac G4.



Specification Sheet

Power Mac G4

Technical Specifications

All configurations include the following features (unless noted).

Processor

- 400-, 450-, or 500-MHz PowerPC G4 processor
- Velocity Engine vector processing unit with 162 integrated Single Instruction Multiple Data (SIMD) instructions
- Full 128-bit internal memory data paths
- Powerful new floating-point unit supporting single-cycle, double-precision calculations
- Data stream prefetching operations supporting four simultaneous 32-bit data streams
- 1MB backside level 2 cache running at half the processor speed
- 100-MHz system bus supporting up to 800-MBps data throughput

Memory

- 64MB, 128MB, or 256MB of PC100 SDRAM (3.3-volt, unbuffered, 64-bit-wide, 168-pin, running at 100 MHz)
- Four DIMM slots support up to 1.5GB of PC100 SDRAM (999MB maximum per application) using the following DIMMs:
 - 32MB, 64MB, or 128MB DIMMs (64-bit-wide, 64-Mbit technology)
 - 128MB or 256MB DIMMs (64-bit-wide, 128-Mbit technology)
 - 512MB DIMMs (64-bit-wide, 256-Mbit technology)

Storage¹

- One of the following hard disk drives:
 - 10GB 5400-rpm Ultra ATA/33 hard disk
 - 20GB 7200-rpm Ultra ATA/66 hard disk
 - 27GB 7200-rpm Ultra ATA/66 hard disk
- One of the following optical drives:
 - 32x-speed (maximum) CD-ROM drive
 - DVD-ROM drive with DVD-Video playback
 - DVD-RAM drive with DVD-Video playback
- 100MB Zip drive (some configurations)
- Three 3.5-inch hard disk drive expansion bays
 - One ATA drive preinstalled in standard configurations
 - Support for up to two internal ATA drives
 - Support for up to three internal SCSI drives

Graphics support

- ATI RAGE 128 graphics card with 16MB of SDRAM graphics memory installed in a dedicated graphics slot (either a 66-MHz PCI slot or a 133-MHz AGP 2X slot)¹
- Support for up to 1,600- by 1,200-pixel resolution at 32 bits per pixel (millions of colors) and up to 85-Hz refresh rate
- 15-pin mini D-Sub VGA connector

Keyboard and mouse

- Apple USB Keyboard with 2-meter cable and Apple USB Mouse

Electrical requirements and agency approvals

- Line voltage: 115V AC (90V to 132V AC) or 230V AC (180V to 264V AC)
- Frequency: 47 to 63 Hz, single phase
- Maximum continuous power (not including display): 200W
- EPA ENERGY STAR and Blue Angel compliant (some configurations)

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 (3,048 m)

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: 30.0 pounds (13.6 kg)²

Interfaces¹

Interfaces vary depending on the configuration.

Model	M7631	M7232, M6921
Connectivity	<ul style="list-style-type: none"> • FireWire • USB 	Two 400-Mbps ports Two ports (12 Mbps total)
Communications	<ul style="list-style-type: none"> • Ethernet • Wireless networking 	10/100BASE-T Ethernet connector (RJ-45) —
		Optional 11-Mbps AirPort wireless networking card; IEEE 802.11 DSSS compliant Optional AirPort Base Station containing 56K modem and 10/100BASE-T Ethernet port Built-in 56K V.90 modem card ³ (M7232) Optional (M6921)
	<ul style="list-style-type: none"> • Modem 	Built-in 56K V.90 modem card ³
Expansion	<ul style="list-style-type: none"> • PCI slots • Graphics slot 	Three full-length 64-bit, 33-MHz PCI slots open One 66-MHz PCI slot with graphics card
Video	<ul style="list-style-type: none"> • Video connector 	15-pin mini D-Sub VGA connector
Audio	<ul style="list-style-type: none"> • Analog input/output • Speaker • Digital USB audio input/output 	One input and one output minijack supporting 16-bit stereo audio; 44.1-kHz sampling rate Built in
	<ul style="list-style-type: none"> • Digital FireWire audio input/output 	Support for external third-party peripherals such as microphones, speakers, and MIDI devices Support for external third-party peripherals such as CD-RW drives and DVD jukeboxes

¹Storage devices and interfaces vary among configurations; see Available Configurations chart for details.

²Weight varies depending on configuration.

³Actual modem speeds lower; speed depends on connection rate and other factors.



Specification Sheet

Power Mac G4

Available Configurations

Power Mac G4



Order no.	M7631LL/A
Processor speed	400 MHz
Memory (PC100 SDRAM)	64MB (one DIMM)
Backside level 2 cache	1MB at 200 MHz
Hard disk drive	10GB Ultra ATA/33
Optical drive	CD-ROM
Zip drive	No
FireWire ports	Two 400-Mbps ports
USB ports	Two 12-Mbps ports
Wireless networking	No
56K modem	Yes
EPA ENERGY STAR and Blue Angel compliant	No
Compatible Apple displays	M6221, M6204

Order no.	M7232LL/A	M6921LL/A
Processor speed	450 MHz	500 MHz
Memory (PC100 SDRAM)	128MB (one DIMM)	256MB (one DIMM)
Backside level 2 cache	1MB at 225 MHz	1MB at 250 MHz
Hard disk drive	20GB Ultra ATA/66	27GB Ultra ATA/66
Optical drive	DVD-ROM with DVD-Video playback	5.2GB DVD-RAM with DVD-Video playback
Zip drive	Yes	Yes
FireWire ports	Three 400-Mbps ports	Three 400-Mbps ports
USB ports	Two ports (12 Mbps each; 24 Mbps total)	Two ports (12 Mbps each; 24 Mbps total)
Wireless networking	Optional	Optional
56K modem	Yes	Optional
EPA ENERGY STAR and Blue Angel compliant	Yes	Yes
Compatible Apple displays	M6221, M6204, M7478	M6221, M6204, M7478

Related Products

- Apple displays
 - Apple Studio Display (17-inch; 16-inch viewable); order no. M6221
 - Apple Studio Display (21-inch; 19.8-inch viewable); order no. M6204
 - Apple Cinema Display (22-inch flat panel); order no. M7478
- See Available Configurations chart for compatibility information. The Apple Cinema Display is available through the online Apple Store.
- Apple 56K V.90 Internal Modem; order no. M7405

For More Information

For more information about these products, or to find out where to buy Apple products, visit www.apple.com/products on the World Wide Web or call 800-538-9696. To purchase these products from the Apple Store, go to www.apple.com/store.

Visit the Macintosh Products Guide at www.apple.com/guide for the latest information on over 12,000 hardware and software products for your Macintosh.

Apple stands behind its products with world-class service and support. Offering quality parts, extended hardware service options, phone support, and support via the Internet, we provide you with support choices that meet your needs. For more information, visit www.apple.com/support.

All models also include:

- Apple USB Keyboard and Mouse
- Mac OS 8.6
- Microsoft Internet Explorer
- Netscape Communicator
- Complete setup, learning, and reference documentation

Product contains some electronic documentation. Backup software provided on CD-ROM.

Build-to-order Options

In addition to choosing from among Apple's prebuilt systems, you can order a custom-configured computer from your local reseller or the online Apple Store. Build-to-order options include processor speed, memory, hard disk drives, optical drives, Zip drive, 56K modem, AirPort wireless networking, SCSI support, and more. For up-to-date information about options and availability, visit www.apple.com/store.

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