

# Power Mac G4

With the new Power Mac G4, you'll be able to make movies, create music CDs, and even produce your own DVD videos. Now with five slots—one AGP 4X graphics slot and four high-performance PCI slots—it's the most expandable Macintosh ever. Most of all, the Power Mac G4 is fast—with a PowerPC G4 processor at up to 733 megahertz, a state-of-the-art NVIDIA GeForce2 graphics card, and an improved system architecture. In fact, the multitalented Power Mac G4 redefines all previous notions of what a desktop computer can do.





# Power Mac G4



#### **Features**

#### Speed redefined

- Fastest-ever PowerPC G4 with Velocity Engine, up to 733-MHz processing speed
- Optional dual 533-MHz PowerPC G4 processors
- New on-chip level 2 cache and backside level 3 cache (733-MHz systems)
- New high-performance graphics cards and AGP 4X slot
- 133-MHz system bus and PC133 SDRAM up to 1.5GB¹
- PCI throughput up to 215 MBps
- · Built-in Gigabit Ethernet

# Personalized music libraries and custom CDs

- CD-RW drive for creating music CDs and archiving data files
- iTunes software included for managing digital audio collections and creating music CDs<sup>2</sup>

# Movies and DVDs from start to finish

- FireWire for connecting DV camcorders and digital audio peripherals
- iMovie software included for making Desktop Movies
- Optional DVD-R/CD-RW drive with iDVD software included for creating interactive DVD videos
- Optional Final Cut Pro software for professional video editing
- Optional DVD Studio Pro software for professional DVD authoring

#### More expandable than ever

- Four high-performance PCI slots (64 bit, 33 MHz)
- Easy access to built-in expansion bays and slots
- Two 400-Mbps FireWire ports for connecting up to 63 devices<sup>3</sup>
- Two Universal Serial Bus (USB) ports for connecting up to 127 peripherals
- Optional AirPort wireless networking<sup>4</sup>

With outstanding performance, state-of-the-art graphics, and incredible expandability, the new Power Mac G4 is the fastest and most expandable Macintosh ever. But the Power Mac G4 goes even further by including innovative tools for creating movies, music CDs, and even DVD videos.

Supercomputing-caliber processors and an improved system architecture give this computer its power. Processor-intensive tasks such as color conversions, Gaussian blurs, and video special effects execute faster than ever. In optimized applications such as Adobe Photoshop and Apple Final Cut Pro, multiprocessor Power Mac G4 systems can achieve exponential gains in speed over single-processor systems. What's more, Gigabit Ethernet is built into every Power Mac G4, enabling large files to speed across your network.

Graphics for design and gaming are more than twice as fast as with the previous G4 system, thanks to the new AGP 4X graphics bus and GeForce2 graphics card. With up to 1.5 gigabytes of main memory, you can store large graphics files in RAM to execute superfast image manipulations. Systems outfitted with the optional NVIDIA GeForce3 graphics card can attain state-of-the-art 3D performance and rendering.

When it comes to Desktop Movies and music management, the new Power Mac G4 is unrivaled. iTunes software is included to let you digitize your music library, build playlists, and create your own music CDs using the CD-RW drive. Your new Power Mac G4 comes with iMovie video editing software, so you can start on your movie masterpiece right away. And if you choose the optional DVD-R/CD-RW drive, you'll also receive Apple's revolutionary iDVD software—the easiest way ever to turn Desktop Movies into DVD videos. Video professionals will want to choose Apple's award-winning Final Cut Pro software for sophisticated editing, compositing, and special effects. To produce professional-level DVDs from start to finish, you can add DVD Studio Pro for a complete set of interactive authoring and production tools.

With ample expansion capabilities, the Power Mac G4 can accommodate the widest range of professional tasks. Four high-performance PCI slots let you add graphics, audio, video, or SCSI cards. The improved PCI bus achieves a throughput of up to 215 megabytes per second—more than twice as fast as before. FireWire ports allow you to connect DV camcorders, hard disk drives, and more.

Speed, graphics, movies, music, DVDs, and expansion. With the new Power Mac G4, we've added new meaning to the term desktop computer, so you can redefine the ways you work and play.



# **Technical Specifications**

#### Processor

- 466-, 533-, or 733-MHz PowerPC G4 processor; or dual 533-MHz 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 level 2 cache running at processor speed, plus 1MB backside level 3 cache running at one-fourth the processor speed (733-MHz systems)
- 1MB backside level 2 cache running at half the processor speed (466-MHz and 533-MHz systems)
- 133-MHz system bus supporting over 1-GBps data throughput

#### Memory

- 128MB or 256MB of PC133 SDRAM
- Three DIMM slots support up to 1.5GB of PC133 SDRAM using the following:
- 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)

#### Storage<sup>5</sup>

- One of the following hard disk drives:
- --- 40GB 7200-rpm Ultra ATA/66
- --- 60GB 7200-rpm Ultra ATA/66
- One of the following optical drives:
- CD-RW drive (writes CD-R at 8x, writes CD-RW at 4x, reads CD at 32x)
- Combination DVD-R/CD-RW drive (writes DVD-R at 2x, reads DVD at 6x, writes CD-R at 8x, writes CD-RW at 4x, reads CD at 24x)
- Three 3.5-inch hard disk 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
- Cuppert for a combination of internal CCCI and
- Support for a combination of internal SCSI and ATA drives (up to one ATA and two SCSI)
- Optional Zip 250 drive

## **Expansion**

- Four full-length 64-bit, 33-MHz PCI slots
- One AGP 4X slot with graphics card installed
- Two 400-Mbps FireWire ports (15W total power)3
- Two USB ports (12 Mbps each)

#### **Graphics support**

- ATI RAGE 128 Pro graphics card with 16MB of SDRAM graphics memory or NVIDIA GeForce2 MX graphics card with 32MB of SDRAM; installed in a dedicated AGP 4X graphics slot
- Optional ATI RADEON graphics card with 32MB of Double Data Rate (DDR) RAM
- Optional NVIDIA GeForce3 graphics card with 64MB of DDR RAM
- Support for up to 1920-by-1200-pixel resolution at 32 bits per pixel (millions of colors)
- Apple Display Connector (ADC)
- 15-pin mini D-Sub VGA connector

#### **Communications**

- 10/100/1000BASE-T Ethernet connector (RJ-45)
- Built-in 56K V.90 modem card<sup>6</sup>
- Optional 11-Mbps AirPort Card; IEEE 802.11 DSSS compliant<sup>4</sup>
- Optional AirPort Base Station containing 56K modem and 10BASE-T Ethernet port<sup>4</sup>

#### Audio

- Apple speaker minijack (16 bit) for connection to Apple Pro Speakers
- Headphone jack (16 bit)
- Optional Apple Pro Speakers
- 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 (180V to 264V AC)
- Frequency: 47 to 63 Hz, single phase
- Maximum continuous power: 338W
- U.S. EPA ENERGY STAR compliant

## **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
- Altitude: 0 to 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)<sup>7</sup>

# **Configurations**

Order no.	M7627LL/A	M7688LL/A	M8451LL/A	M7681LL/A
Processor	466-MHz PowerPC G4	533-MHz PowerPC G4	733-MHz PowerPC G4	733-MHz PowerPC G4
On-chip cache	_	_	256K L2 at 733 MHz	256K L2 at 733 MHz
Backside cache	1MB L2 at 233 MHz	1MB L2 at 266 MHz	1MB L3 at 183 MHz	1MB L3 at 183 MHz
Memory	128MB	128MB	256MB	256MB
Hard disk drive <sup>5</sup>	30GB (5400 rpm)	40GB (7200 rpm)	60GB (7200 rpm)	60GB (7200 rpm)
Graphics support	ATI RAGE 128 Pro with	NVIDIA GeForce2 MX with	NVIDIA GeForce2 MX with	NVIDIA GeForce2 MX with
	16MB of SDRAM	32MB of SDRAM	32MB of SDRAM	32MB of SDRAM
Optical drive	CD-RW	CD-RW	CD-RW	DVD-R/CD-RW
FireWire <sup>3</sup>	Two 400-Mbps ports	Two 400-Mbps ports	Two 400-Mbps ports	Two 400-Mbps ports
USB	Two ports	Two ports	Two ports	Two ports
PCI slots	Four slots	Four slots	Four slots	Four slots
Ethernet	10/100/1000BASE-T	10/100/1000BASE-T	10/100/1000BASE-T	10/100/1000BASE-T
Wireless networking4	AirPort ready	AirPort ready	AirPort ready	AirPort ready
Modem <sup>6</sup>	56K V.90	56K V.90	56K V.90	56K V.90

All models also include Apple Pro Keyboard, Apple Pro Mouse, and FireWire camcorder cable; Mac OS 9.1; QuickTime, iMovie 2, iTunes; Microsoft Internet Explorer, Microsoft Outlook Express, Netscape Communicator, FAXstf Pro, and Palm Desktop; Apple Hardware Test CD; complete setup, learning, and reference documentation; and limited warranty. Configurations with DVD-R/CD-RW drive include iDVD authoring and encoding software. All models also include 30 days of free Internet service through EarthLink.

Product contains electronic documentation. Backup copy of software is provided on CD-ROM.

# **For More Information**

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

Visit the Macintosh Products Guide at www.apple.com/guide for the latest information on more than 18,000 hardware and software products for your new computer.

Apple offers iTools, a free suite of Internet services, to help you get more out of using the web. Visit www.apple.com to sign up.

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.

#### Apple

1 Infinite Loop Cupertino, CA 95014 408-996-1010 www.apple.com

# **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; however, availability can vary. For up-to-date information, visit www.apple.com/store or call 800-MY-APPLE.

- Processor: 466-MHz, 533-MHz, dual 533-MHz PowerPC G4
- Memory: 128MB, 256MB, 384MB, 512MB, 768MB, 1GB, 1.5GB<sup>1</sup>
- Hard disk drives: 30GB Ultra ATA/66 (5400 rpm), 40GB Ultra ATA/66 (7200 rpm), 60GB Ultra ATA/66 (7200 rpm), 36GB Ultra160 SCSI (10,000 rpm), 72GB Ultra160 SCSI (10,000 rpm)<sup>5</sup>
- Optical drives: CD-RW. DVD-ROM
- Graphics: ATI RAGE 128 Pro with 16MB of SDRAM, NVIDIA GeForce2 MX with 32MB of SDRAM, ATI RADEON
  with 32MB of DDR RAM, NVIDIA GeForce3 with 64MB of DDR RAM
- Audio: Apple Pro Speakers, Harman Kardon iSub, Harman Kardon SoundSticks
- Other: Zip 250 drive, SCSI PCI card, Ultra160 SCSI PCI card, AirPort Card, AirPort Base Station

# **Apple Displays**

- Apple Studio Display (17-inch CRT, 16-inch viewable); M7770ZM/A
- Apple Studio Display (15-inch flat panel); M7928ZM/A
- Apple Cinema Display (22-inch flat panel); M8058ZM/A
- 1 999MB maximum per application in Mac OS 9.
- 2 ITunes may require Internet download; Internet access fees may apply. ITunes is licensed for reproduction of noncopyrighted materials or materials the user is legally permitted to reproduce.
- 3 Actual rates will vary.

- 4 Wireless Internet access requires AirPort Card, AirPort Base Station, and Internet access (fees may apply). Some ISPs are not currently compatible with AirPort, including America Online. Range may vary with site conditions.
- $^{5}\,$  For hard drive capacity measurements, 1GB = 1 billion bytes; actual formatted capacity less.
- 6 Actual modern speeds lower.
- 7 Weight varies by configuration and manufacturing process.



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April 2001 L12505D