



The Power Mac G4 is here.

Computers get marginally faster every year.

Megahertz, a popular (but simplistic) measure
of performance, usually increases around 35%
annually. But once or twice in a decade, we
experience a breakthrough that leaps far beyond
these incremental steps. Today we present such
a breakthrough: the new Power Mac* G4.

This is not just the fastest Mac in history.

It's the fastest personal computer in history.

Rather than being just 35% faster, the new Power Mac G4 is up to a stunning 100% to 200% faster than the fastest Pentium III-based PCs:

With performance increasing at its usual pace, the new Power Mac G4 wouldn't have arrived until 2003. Fortunately, breakthroughs do happen.

In CPU and Photosbop test



New face, new brain, new era.

 $We love building the fastest, best-designed \qquad redefines high performance for the entire\\$ computers in the world. We realize they're not for everyone. But for

creative professionals, scientists, educators, artists, musicians and

others who demand



the highest possible performance, they're often nothing less than essential.

With its Pentium-crushing speed and convention-crushing design, the Power Mac G4 picks up where the best-selling G3 left off. Its enclosure has evolved to a highly polished silver and graphite, yet it still offers easy access to every internal component through its unique swing-open side door.

Beneath its new face, however, is where the Power Mac G4 really shines. At its core is a brand-new brain—the G4 processor—that

industry. (That's a story in itself, as you'll see in the following pages.)

And we've designed the rest of the new Power Mac G4 to keep up with the processor. Our two high-end models feature a 100MHz system bus with three times the memory bandwidth of the G3. As well as superfast Ultra ATA/66 hard drives and accelerated AGP 2X graphics.



So, if you're one of those professionals who routinely push their computer to the limit, we invite you to witness the beginning of a new era of Power Mac power. Hold on tight.



What you really need is a supercomputer.

Supercomputers have helped achieve breakthroughs in almost every field of science. But almost no one outside the scientific community could possibly need one. Or so it was thought.

That was before Photoshop filters started resembling the most sophisticated image processing done by NASA. And before Internet security started demanding CIA-strength cryptography. And before compressing QuickTime' or MP3 files started expanding your workday.

These tasks, and many more like them, have two things in common: They choke traditional processors. And they can be dramatically sped up by exactly the kind of computational horsepower that supercomputers were created to provide.

But who has the money, or even the space, to have their very own supercomputer?

The first supercomputer on a chip.

What makes a supercomputer "super" is its ability to execute at least one billion floating-point operations per second. It's a staggering measure of speed known as

a "gigaflop."

The new PowerPC G4, architected by Apple, Motorola and IBM, is the first microprocessor that can deliver a sustained

performance of over one gigaflop. In fact, it has a theoretical peak performance of four gigaflops.

The secret of the G4's revolutionary performance is its aptly named Velocity Engine." It's the heart of a supercomputer miniaturized onto a sliver of silicon. The Velocity Engine can process data in 128-bit chunks, instead of the smaller 32-bit or 64bit chunks used in traditional processors. In addition, it can perform four (in some cases eight) 32-bit floating-point calculations in

> a single cycle-two to four times faster than traditional processors.

So how does the G4 with its Velocity Engine stack up against Intel's

brand-new Pentium III processor?

To find out, we went right to the source: We used a set of Intel's own performance tests published on their website.

Using six of Intel's tests, the 500MHz G4 was, on average, almost three times as fast as the 600MHz Pentium III (2.94 times, to be exact).

These benchmark advantages translate directly into real-world advantages.

For example, typical Photoshop tasks run twice as fast on the Power Mac G4 as they do on the fastest Pentium III-based PCs, with specific Photoshop filters running up to four times faster. Compressing QuickTime files is also twice as fast.

In fact, "twice as fast" is a refrain you're going to be hearing often, as more and more software developers tap the power of the G4 with its Velocity Engine to accelerate the performance of their applications – just as Adobe has already done with Photoshop.



really do matter G4's Velocity Engine can process when your work

Because gigaflops

information in 128-bit chunks, compared with the 32- or 64-bit revolves around

computation-hungry software.

chunks in traditional processor graphics, animation, 3D games, video effects, 3D rendering and a host of other

Chances are, you've never even heard of a gigaflop before. But very soon you won't be able to live without at least one on your desk.

Intel Signal Processing Library Performance Specification

Test	Pentium III Clock Cycles	G4 Clock Cycles	G4 Performance	G4 Performance (Adjusted for MHz)
1024 dim. Square (bsqr1)	1.30	0.50	2.60 times faster	2.17 times faster
1024 dim. Multiply (bMpy2)	1.33	0.75	1.77 times faster	1.48 times faster
1024 dim. Dot Product (DotProd)	2.21	0.50	4.42 times faster	3.68 times faster
256 Pt. Complex FFT (FFT)	6.94	4.00	1.74 times faster	1.45 times faster
32 tap x 1024 dim. FIR Filter (bFir)	0.95	0.33	2.88 times faster	2.40 times faster
32 tap x 1024 dim. Convolution (Conv)	84.99	11.00	7.73 times faster	6.44 times faster
		Average	3.52 times faster	2.94 times faster

The 500MHz G4 processor, with its Velocity Engine, is an average of 2.94 times as fast as the fastest Pentium III (600MHz).



A revolutionary computer deserves a revolutionary display.

Introducing the ultimate companion to the Power Mac G4: the Apple Cinema Display: With its 22-inch screen (measured diagonally), it's the largest LCD display ever brought to market.

Its viewable area is as big as a 24-inch flat CRT display. But it's twice as bright and sharp, with triple the contrast ratio and zero flicker. And its millions of colors remain true from almost any viewing angle.

Like a movie theater, the Apple Cinema Display has a letterbox format (1600x1024 pixels), with room enough to display an entire 11x17 image. And unlike most other displays, it receives its data digitally from the computer, preserving the highest-quality image.

The Apple Cinema Display is state-of-the-art technology, and supplies will be limited. And at \$3999' it's not for every pocketbook. But if you're fortunate enough to use one, your office view will never be the same again.

*Suggested retail price



If you don't see your perfect G4 here, feel free to build your own.



Price*	\$1599	\$1999	\$2799	\$3499
Processor	400MHz G4	450MHz G4	450MHz G4	500MHz G4
L2 Backside Cache	IMB 200MHz	1MB 225MHz	1MB 225MHz	1MB 250MHz
Memory (SDRAM)	64MB 1.0GB max.	64MB 1.0GB max.	128MB 15GB max.	128MB 1.5GB max.
Max. Memory Bandwidth	400MB/sec	400MB/sec	800MB/sec	800MB/sec
Graphics	RAGE 128/PCI 16MB graphics memory	RAGE 128/PCI 16MB graphics memory	RAGE 128/AGP 2X 16MB graphics memory	RAGE 128/AGP 2X 16MB graphics memory
Hard Drive 3 internal bays, 1 used	10GB Ultra ATA/33	13GB Ultra ATA/33	20GB Ultra ATA/66	27GB Ultra ATA/66
Removable Storage	CD-ROM	DVD-ROM DVD-Video playback 100MB Zip Drive	DVD-ROM DVD-Video playback 100MB Zip Drive	DVD-RAM DVD-Video playback 100MB Zip Drive
Ethernet 10/100BASE-T	Yes	Yes	Yes	Yes
FireWire Ports (400Mbps)	2	2	3 (1 internal)	3 (1 internal)
USB Ports	2 (12Mbps total)	2 (12Mbps total)	2 (24Mbps total)	2 (24Mbps total)
AirPort™ Wireless Networking 11Mbps1EEE 802:11	n/a	n/a	Optional	Optional
56K V.90 Modem	Built in	Built in	Optional	Optional
Apple Cinema Display	n/a	n/a	Optional	Optional

Find the new Power Mac G4 at your local authorized Apple reseller. Or build your own perfect system—from over 15,000 configurations—by visiting the Apple Store at www.apple.com.



Think different.