y Dan Radmacher

I was one of those people who grumbled loudest when Apple did in the clones. I swore I would never buy another Apple computer, even if it meant going over to the Dark Side of Wintel.

I swore too soon.

The G3

Apple's new G3 systems are everything we've come to expect - and everything Apple feared - from clone makers: Fast, innovative and inexpensive. The G3/233 MHz desktop model sitting in front of me is the fastest computer I've ever worked on, much less owned.

Running MacBench 4.0, my G3 scored 689 percent on the processor test compared to a 6100/60. Coincidentally, my old computer was a 6100/66. That means I'm seeing close to a sixfold increase in processor speed.

But the G3 compares well to any Mac currently shipping. The 266 MHz version is considerably faster than Apple's top of the line 9600/350. My 233 MHz version scored roughly the same as the 9600 in Macworld's testing (it didn't do quite as well in video or FPU tests, however).

he 9600/350 retails for \$3,800. I bought the G3/233 for just under \$2,000, including shipping.

Built for speed

What makes the G3 so fast? The new PowerPC 750 chip is optimized for the Macintosh OS (System 8, of course, comes preinstalled). The 512 kilobyte "backside" cache is connected directly to the CPU via a speedy 117 MHz bus (133 MHz on the 266 G3s). The system bus is also optimized at 66 MHz.

How does all this translate into real-life performance? Netscape, which takes a good 30 seconds to load on the 7200/120 I use at work, loads in less than half that time. Word 6 loads in mere seconds. Screen redraw in Pagemaker is instantaneous.

What about games?

Ah, but since this is Inside Mac Games, so what you want to know is how the G3 handles games. Beautifully, just beautifully.

Until games catch up with the new 750 PowerPC chip, forget about optimizing your system to run games. To get acceptable performance out of my 6100/66, I had to run minimal extensions and turn off virtual memory. Gamers are used to this.

On the G3, I've kept all extensions and virtual memory on. Still, it handled everything I threw at it with ease: Hornet 3, Duke Nuke 'Em, Marathon Infinity (at full screen on a 17" monitor in thousands of colors, I got 38 frames per second), Quake, TIE Fighter. With all available options on, every one of these games ran with perfect smoothness. Turning virtual memory off doubled the frames per second in Marathon Infinity, but made no noticeable difference to the eye.

The G3 is a game-playing demon from the ground up. A 24-speed CD-ROM is standard, as is an ATI 3D Rage II chip and 2 megabytes of VRAM (I haven't had a chance yet to really test out the 3D acceleration, but the VRAM finally allows me to see more than 250 colors on my 17" monitor). You can upgrade to 6 megs of VRAM. Three PCI slots open up the potential for further graphics acceleration, including 3Dfx cards.

Contrary to MacWorld's recent cover story, the G3 desktop models do not come with a

56Kbps internal modem (at least the 233 MHz version doesn't), though one can be added to the "personality card" that contains the 16-bit stereo in/out.

The G3 comes with 32 megs of RAM. With three slots, it is upgradable to 192 megs (technically, its three slots could hold twice as much, but there isn't enough room on the motherboard for 128-meg DIMMs).

A 4-gig hard drive leaves you plenty of room for games — with space to burn for playing off RAM disks to further speed some games up.

The G3s should be extremely upgradable when the time comes. The processor chip is mounted in a ZIF (Zero-Insertion Force) socket, which makes swaps simple.

Buyers' paradise

The Mac market is primed for buyers right now. The dwindling supply of Motorola and Power Computing clones are going for amazing prices, and the introduction of the powerful G3s will put downward pressure on Mac models such as the 6500/250, which has the same retail price as the G3/233, but doesn't offer near the performance.

I had sworn off Apple because of bitterness about the clone move. But the G3 has made a true believer out of me.

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