NEW LIFE FOR GERIATRIC G4s

Macs are heralded for keeping their value and practicality longer than PCs, but time eventually catches up with them, and new software won't work well on old hardware—if it works at all. While it's not as readily upgradeable as a PC processor, you can upgrade the G4 processor in certain Power Mac G4 towers using Newer Technology's MAXPower G4 upgrade. We tested the MAXPower G4/7448 2.0GHz in a 450MHz Power Mac G4 purchased in 1999. The new processor transformed the Power Mac from garage sale fodder to a Mac that can run current versions of most software.

The MAXPower G4/7448 upgrade works in several desktop Macs, including the first AGP system, the Gigabit Ethernet model, the Digital Audio G4, and the Quicksilver G4 (you can verify compatibility on Newer Technology's website). The MAXPower G4/7448 includes detailed documentation and even a thin screwdriver to help with installation. We're used to working inside computers and had no problems installing the processor, but if you've never opened your Mac's case before, ask a friend for help, or go to a local Macintosh repair shop. (Sorry, you can't have an Apple Genius do it for you at the Apple Store.) Basically, you remove the old heat-sink and processor, install the new processor and fans, and plug the fans into the internal power cables. The upgrade also requires a firmware update that tweaks your Mac's most basic level of code (the firmware runs even before the operating system starts) to recognize the new processor.

We had no problem with compatibility and didn't need to install any software drivers to harness the new speed. (Newer Technology expects that Mac OS 10.5 will work immediately with the processor upgrade, but if not, the company will issue an update.) The MAXPower G4/7448 ran Adobe Creative Suite 3 apps and productivity software fast enough for daily use. The unmodified Power Mac G4 took over 10 minutes to import Bob Dylan's *Blood on the Tracks* CD into iTunes; with the MAXPower G4/7448, the import took a little less than 4 minutes. When we ran the Retouch Artists Photoshop Speed Test (free, retouchartists .com/pages/speedtest.html) in Photoshop CS3, the unmodified Power Mac took 22 minutes. The same test took only 6 minutes, 45 seconds with the MAXPower G4/7448. We were even able to run the graphically demanding Quake 4 game ($49.95, www.aspyr.com) on the G4, albeit with low resolution and low-quality graphics. Using our test Power Mac with its original 450MHz G4 processor, Adobe CS3, Quake 4, and other apps were so slow as to be practically useless. The upgrade made a clear difference and will allow us to hang on to the G4—which has 1GB of RAM and an ATI Radeon 9800 video card—as an everyday Mac for a while longer.

The bottom line. While several configurations are available, the target audience for this upgrade is specific. If your G4 is supported and already close to the speed of the MAXPower, you're better off with a new Mac. But if you're upgrading a G4 with a slower processor, the MAXPower can give that system another year or more of daily use.—*Zack Stern*