

Send in the clones

Which would you buy: one of Apple's PowerSurge Macs or a Power Computing Mac clone? Chris Cain weighs up the pros and cons, reviews the latest software updates — including the exciting Photoshop 3.0.4, and revisits Pfhor.

Undoubtedly, the biggest news in the Mac world this month is the arrival in the UK of the Power Computing Mac clones. Top London-based distributor Computer Warehouse (CW) is the first to bring these to our shores and it will be interesting to see how they fare against Apple's new range of competitively priced PowerSurge Macs. The clones are fully compliant with Mac OS and come complete with a large number of bundled software titles.

The basic specification on offer from CW is a 100MHz PowerPC601, 256Kb

level two cache, three NuBus slots, a 365Mb hard disk and 8Mb of RAM. Ethernet and enhanced SCSI are also included in a PC-style desktop case for a mere £1,299. This compares favourably with an official Apple 8100/100 which, with 8Mb and a 700Mb hard disk, is likely to set you back around £2,300. (Both prices exclude VAT.)

Neither machine comes with a keyboard or screen as standard (something I had hoped the clone makers would fix) but even when these are added, the price difference between the products

is astounding. Given the choice between them, I can think of no reason to go for the official Apple model other than one of brand loyalty.

PCI power

Nevertheless, there are plenty of reasons to buy one of the new PowerSurge Macs instead. Firstly, they have Intel's Peripheral Component Interconnect (PCI) architecture, which is definitely the expansion bus of the foreseeable future. All of Apple's business machines now have this as standard — only consumer-orientated Performa models still use the ageing NuBus architecture.

Secondly, all machines from the 7500 upwards are designed to use the next-generation PowerPC604 processor. This gives a further degree of future proofing — something very important in the minds of today's users. Nobody wants to spend lots of money on a machine, only to find that

Power Computing 100: technical specifications

Microprocessor

100MHz PowerPC 601 RISC microprocessor with integrated floating-point processor and 32Kb on-chip cache. 256Kb Level 2 cache (512Kb and 1Mb also available).

Memory

8Mb RAM, expandable to 200Mb.

Graphics

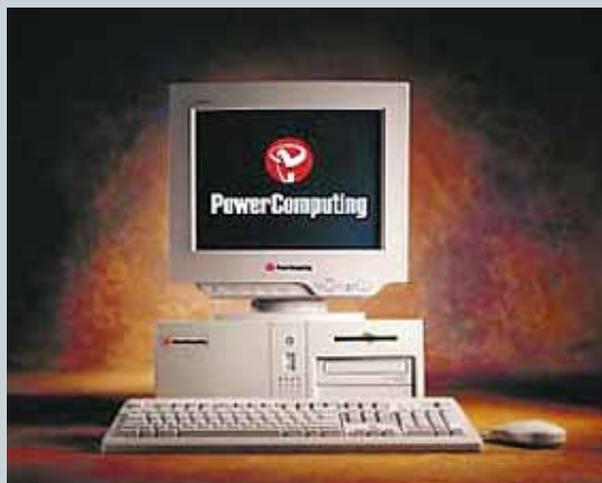
RAM-based built-in video supports all Macintosh-compatible and VGA displays up to 17in (VGA requires an adaptor). Optional high-performance video card.

Floppy Disk Drive

3.5in 1.44Mb self-ejecting floppy drive which supports Mac OS, Windows, DOS, OS/2, and ProDOS diskettes.

Hard Disk Drive

Internal 3.5in 356Mb - 4Gb hard disk. Support for one 5.25in full-height drive and two 3.5in drives, or four 3.5in drives. Optional



CD-ROM drive. 4x rotational speed. 600Kb/sec sustained transfer rate. CD XA/PhotoCD, multi-session compatible.

Networking

Built-in Ethernet (AAUI port). Two high-speed serial ports for LocalTalk, modems or other devices (both can be used with Apple's GeoPort telecom adaptor).

Audio

CD quality, 44.1kHz 16-bit sound input and output capabilities. Microphone and headphone jacks. Built-in speaker.

Expansion

Three NuBus expansion slots.

Clock/calendar. Custom real-time clock IC with long-life lithium battery. I/O ports. Dual-channel SCSI interfaces for high-speed disk I/O and RAID solutions. ADB ports for keyboard and mouse.

Power Supply

200W. Input: 90v-240v.

MPEG playback

Sparkle provides MPEG playback in software. The quality depends on the power of your CPU

they need to upgrade the whole thing in a year's time. By providing the processor on a daughtercard, Apple has significantly extended the lifespan.

Another reason is the price: a 7500/100 8/500/CD costs £1,749 (plus VAT) — slightly more money for much greater performance.

In theory, the arrival of products like the Power Computing machines should threaten Apple's business, but in reality it can only help to further establish the Mac as the only serious competitor to the WinTel alliance. It also forces the company to remain competitive with regard to specifications and pricing, which is good news for everyone.

US-based Newer Technology has launched a range of products for the 5300 series of Powerbooks, including memory upgrades, PC cards for modem, Ethernet and fax functions, and an external monitor adaptor called Colour Palette which gives a 16-bit colour display.

Photoshop update

Mac users wanting to keep their systems in tip-top shape will be interested in three recent software updates. First up, Adobe has released Photoshop 3.0.4 which, among other things, adds direct support for the PowerPC604 processor. At last,

users who've splashed out on the new systems will see what this workhorse is capable of.

Among the new features are faster Skew, Rotate and Gaussian Blur facilities on all PowerMacs, a fat version of Adobe Type Manager, support for TWAIN 36/48-bit scanners and on-line registration. There is improved importing of Illustrator files and a scratch-disk efficiency indicator to let the user know the amount of time Photoshop is spending with the scratch disk.

This looks like an essential update and registered users in Europe will receive it free of charge on floppy disk.

Speed doubler patch

Updated too is a patch for Connectix Speed Doubler, which was my choice for the November issue's "Utility of the Month". The patch, downloaded from eWorld, brings your master disk up to version 1.1 and solves problems with all three extensions. It should cure the crashing associated with some PowerPC upgrade cards, incompatibilities with Microsoft Word 4.0, PrintShare and Virex 5, and desktop rebuild crashes.

The Speed Doubler software updates can be obtained either from a distributor such as Computers Unlimited, or via the

company's Internet support site at <http://www.pcworld.com/connectix/techsupp.html>. Updates for both Mac and Windows 3.11 RAM Doubler can be obtained from here, too.

New version QuickTime 2.1

The biggest update, of the three items reviewed here, is to QuickTime 2.1. As usual, this new version of Apple's multimedia architecture claims to provide smoother video playback with full-screen 30fps video on PowerMacs. I'll believe that when I see it.

A new sprite animation track has been added so that developers can create Sonic the Hedgehog-like interactive characters, and there's support for the MPEG file format, too. Apple's Multimedia Tuner extension feature has now been incorporated into Version 2.1.

QuickTime comes as three extensions: QuickTime, QuickTime PowerPlug, and QuickTime Musical Instruments. All can be downloaded as one archived file from Apple's software support Internet sites. Apple has updated its Movie Player application too, and the new version can be obtained from the same place. Movie Player 2.1 has a Present Movie option which replaces Print to Video for full-screen movies, and support for the new features in QuickTime.

While on the subject of movies, I've been playing around with MPEG files, (having performed a test with accelerated PC graphics cards in last month's issue). I was impressed by a utility for Windows called Xing that played back these files using the raw power of the processor without the need for any specific decoding hardware, so off I went in search of a Mac equivalent.

Sparkle

The most promising program I found was a small application called Sparkle, available from eWorld and currently on version 2.4.2. As with Xing, Sparkle provides software decompression and playback of MPEG files on both 680x0 and PowerMacs. The file is encoded as FAT binary and will therefore take advantage of whatever hardware is at hand.

The only limitation I've found with Sparkle is that sound support is limited to playing AIFF data. Files in this format can be associated with MPEG pictures and the two are then played simultaneously. There is no support for playing direct MPEG compressed audio which is normally included in a movie file (the author says he is working on this). If you have files in

.WAV format, as commonly used with Windows, you can also use these by running them through a converter such as Balthazar.

I found that Sparkle produces reasonable results on anything from a PowerMac 7100/80 upwards, and can provide what looks like full 25fps playback on a 9500/132. As processors get more powerful, software MPEG could become a real alternative to buying extra, and often expensive, hardware. If any Mac users know of a better way to replay MPEG files using software alone, let me know.

Mighty machine

Mentioning the 9500/132 was a sneaky way of boasting that PCW now has access to one of these mighty machines. Having tested an early model when the hardware was first announced, I can report that the finished product is just as good. It comes with the latest version of Mac OS System 7.5.2 pre-installed, although not all of the latest native extensions are included in this release. Sound Manager 3.1, QuickTime 2.1 and Native SCSI Manager have to be added separately.

So far I've found no major compatibility problems, apart from a small problem with RAM Doubler which means having to reinstall it if, for any reason, I switch it out with the Extension Manager. Some software problems have been reported with the PowerPC603, as used in the Performa 5200, so I'll be seriously testing the mettle of the PowerPC604.

Cor! more Pffhor

Visit Apple UK after hours and the chances are you'll find everyone armed to the teeth and trying their best to kill each other. It's nothing to do with the water supply or the company's close proximity to Heathrow airport; it's all down to that wonderfully addictive pastime, a networked game of Marathon.



To find out what Marathon's "Bobs" are up to now, you'll have to wait for the full review of the game — but I can reveal that it looks and plays better than the original. The high-resolution texture mapping is superb and

The Pffhor are back for more in Marathon II: Durandell

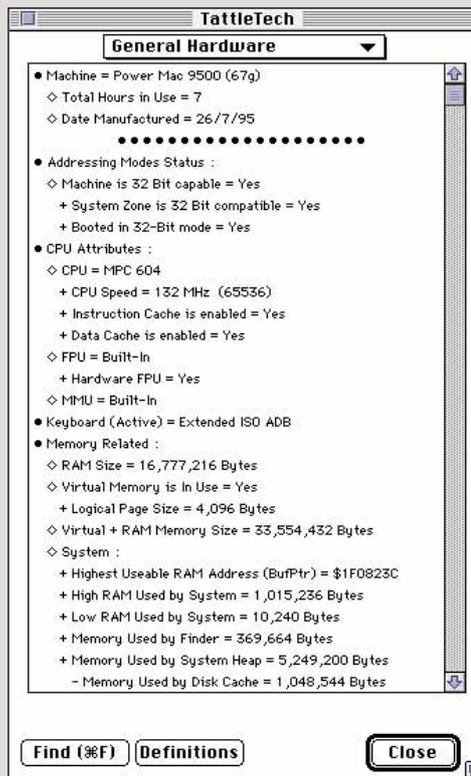
Utility of the Month

Here is a little shareware number I pulled down from eWorld, called TattleTech. No sooner was it downloaded, it saved the day.

TattleTech was originally known as "TattleTale", a program I first encountered in my Mac IIsi days. Much improved since then, it is a semi-diagnostic program that investigates your machine's configuration and reports the findings. TattleTech can tell you about general hardware, such as what kind of processor your machine has, what speed it is and how much RAM there is, and also about more complicated issues such as system patches, extension version numbers and open files. A complete list can then be printed for your records.

TattleTech is ideal for keeping track of what's in and on your system, seeing what parts are written in native PowerPC code, and for tracking down problems with extensions. It costs nothing to try out and could save you a lot of time if you have a software conflict.

TattleTech currently resides in the ZiffNet Hot Downloads section in the eWorld Computer Center. It doesn't sup-



port PCI at the moment, but the author claims that this will be addressed as soon as he gets his hands on a PowerSurge Mac [see main text].

This was the original Mac answer to Doom on the PC and has built up a considerable following since its release last year. Marathon 2 is due to be released soon and an early demonstration has found its way onto my hard disk.

Marathon 2 sees the return of the Pffhor, the nasty alien race hell bent on man's destruction. They didn't like it too much when you stopped them from taking over the starship Marathon in the first game, and now you have to face them again in an all-new conflict.

a wide-screen display gives you even more of what the Americans like to call "in ya face" action. The sound has also been beefed up with 16-bit stereo panning and ambient effects to make you feel as if you're really exploring an alien world.

My demo came from Mac clone makers, Power Computing (and was distributed at the Boston Macworld 95 show), but another demo should be freely available on the Internet by the time you read this.

PCW Contacts

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