

# Guest Editorial

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## What is wrong with the MPC specification and logo?

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MPC — a set of specifications for Multimedia Personal Computers — is one of the most recent buzzwords in the PC and information industry. It is not a standard but a trademark and those PCs which meet the minimum specifications may proudly sport the MPC logo. Oh, one minor thing: the manufacturer has to pay a one-off fee of \$250 000 for the privilege. Microsoft is behind the initiative to promote multimedia, but more importantly to promote the Windows graphical user interface and its multimedia extensions (licensed for an extra fee).

There is nothing wrong with Microsoft's effort to find another goose (after MS-DOS and the CD-ROM extensions) that can lay the golden egg. What is wrong is that the MPC logo may give the endorsement to inadequate configurations and may prompt users to invest in multimedia hardware and systems software that they do not really need. The MPC specs are too little and too much at the same time. In case you have not read the MPC specification, its highlights (or rather, lowlights) are shown below.

Processor	10 MHz 286 CPU
Memory	2 Mb RAM
Hard disk	30 Mb
Video	VGA
Optical disc	CD-ROM with digital output audio
Audio	8-bit sampling, music synthesizer, MIDI input and output
Software	DOS 5.0, Windows 3.x with multimedia extensions

Running Windows on a 10 MHz CPU with a 30 Mb hard disk is a bad joke — it is like buying an expensive car for use on unpaved roads. It is technically possible to run Windows on such a configuration — it just does not make much sense. As for the Intel 286 processor, Bill Gates himself described it back in 1989 (!) as brain-damaged, due to its inadequate memory management capabilities. It has not got any better in the past three years and the 386SX runs circles around it for the same price. The 10 MHz processor will make Windows

even more sluggish than on a 386SX (whose minimum speed is 16 MHz), on which it is still a tortoise. On the 10 MHz 286 processor the labels of the software packages which read 'runs under Windows' will mean 'crawls under Windows'.

Two Mb RAM is below the poverty line for Windows, near starvation, and the 30 Mb hard disk fills up sooner than you can say 1-2-3 (for Windows). But the worst of the specification is yet to come in the form of the unqualified CD-ROM player. Anything which has digital audio output capability (the so-called Red Book standard) goes. What about access time, random throughput rate? These are the essential factors for the continuous transfer and smooth display of still and moving images and for their synchronization with sound — the bread and butter of multimedia. The lack of CD-ROM performance criteria in the specs is an absurd loophole as CD-ROM is the backbone of multimedia, holding the enormous image and audio files.

The first PC with the MPC logo found this loophole. Tandy equipped its new line of PCs with the CDR-1000 CD-ROM drive and they proudly bear the MPC logo. Guess what the 1000 stands for in the model name? The access time — one thousand milliseconds. This is slower than the first generation of CM-100s, Hitachi 1502s or Amdek 100s of the mid-eighties, which featured 800 msec access time, and three times as slow as the current models of Sony, Toshiba and Hitachi. Is that important? You bet it is for multimedia, unless you can live with the jerky quality of Uncle John's video shots of your wedding party made twenty years ago.

So what is too much in the specification? It is the audio and the systems software requirements. Applications which have hi-fi quality sound bytes and which can really make use of some of the special features of the Windows environment (e.g. clip-boarding, object linking) are few and far apart. The mainstream of applications, the big money for CD-ROM publishers, is represented by non-multimedia databases which require neither DOS 5.0 nor Windows, let alone the Windows multimedia extensions.

There are even several multimedia applications which run happily without these extras. *The Illustrated Grolier Encyclopaedia*, *Birds of America* and the *Mammals Multimedia Encyclopaedia* manage nicely without them, as does even the first version of *Compton Encyclopaedia*. To Microsoft's credit, the Bookshelf for Windows database is a superb example of a high quality multimedia application designed for and obviously requiring Windows, but do not hold your breath waiting to see Microsoft demonstrate it on a minimum MPC configuration.

Software for the abstracting/indexing databases can use windowing techniques without Windows, which is indeed useful. For example, the Plus system from Online Computer Systems, Inc. does a nice job of opening a window from with-

in the bibliographic record to show the full name, address and phone number of the publisher at the press of a function key. Dialog OnDisc also uses excellent windowing techniques. The very few text databases which do use Windows do not add any benefit to the search or display processes. The Facts on Files database is accessed through Windows for no apparent reason; the display of maps does not justify the use of Windows.

The MPC logo is going to confuse many users and disappoint even more. Low-selling computers on clearance sale with 10 MHz 286 CPU, 2 Mb RAM and 30 Mb hard disk with discontinued CD-ROM drives will be sporting the MPC logo as they meet the minimum requirements, and glitzy catalogs will persuade users to buy similar machines in 1992 for multimedia purposes.

Many users will believe that they need Windows and the Windows multimedia extensions just because there are images on the CD and some sound bytes here and there. If the MPC initiative has the same aggressive campaign and shenanigans as Windows had in 1991, users will be reluctant to buy anything without the logo, even if a PC without the MPC logo would meet all their requirements perfectly.

Multimedia is great and sure to come, but the MPC specs are far below the minimum required by professionally developed multimedia applications for decent performance. So why has Microsoft initiated MPC and managed to drum up support from some manufacturer? The motivation seems clear; the MPC minimum specifications match the configuration typical of the late eighties when, amidst the hosannas sung in the press in editorials and advertisements alike, sobering voices could also be heard reminding users of the insatiable appetite of Windows for system resources, and users of 286 PCs were discouraged. Those millions who have these or similar PCs and who see the MPC logo on similarly configured machines will feel mistakenly relieved that they can also run Windows applications and will go out and buy Windows. Meanwhile, Microsoft will go laughing all the way to the bank.

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