# Top speed

If speed is of the essence you need a PC with a 200MHz Pentium or equivalent processor. We test 10 of the fastest machines you can buy for under £2,000

In the past, new Intel processors have always commanded a hefty price premium, which was willingly paid by those who wanted, or needed to have, the latest and fastest systems. This time around, with the introduction of the Pentium 200, Intel has priced its chip more realistically and manufacturers have been able to design machines and get them to market at prices within the reach of private buyers and small businesses.

One reason for Intel's apparent generosity is competition from Cyrix, which has released a rival processor running at an equivalent speed to Intel's Pentium. We take a look at 10 of the early contenders, all priced at less than £2,000, including VAT, and most of them equipped with a host of add-ons, accessories and software.

Cheaper 200MHz machines are available but there's little point in matching the fastest processor with an inadequate set of supporting hardware. After all, most buyers looking for the latest processor are keenly interested in speed and ease of use, so they want all-round performance, not just good laboratory benchmarks.
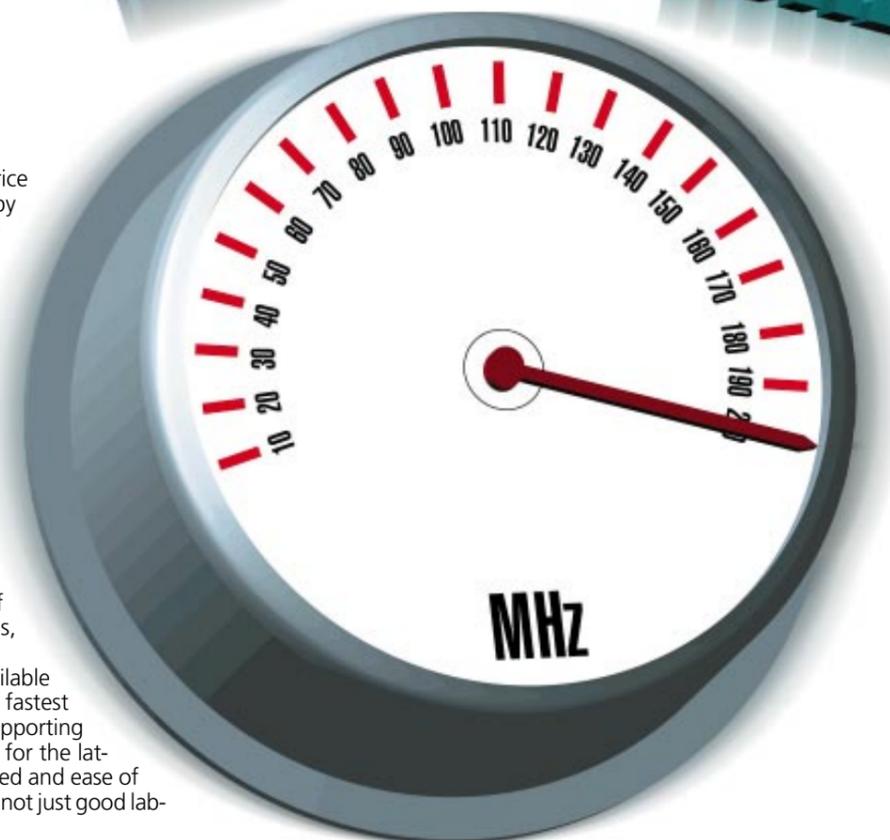
In selecting the test machines our only specifications were that they should be 200MHz PCs supplied with Windows 95 and suitable for home or small business use. But a quick glance at our performance graph shows the machines fell into two broad categories: the bottom four positions are occupied by the PCs fitted with 16Mb of RAM and the top six by those with 32Mb. The message is clear and we leave you to draw your own conclusions.

Brother Graduate Max 200

Brother's PC turned out to be something of a disappointment. The monitor, for example, is a Taxan 15in unit badged with Brother's logo and although Taxan is a respected display manufacturer, the one we received didn't have a very sharp focus and was very hard on the eyes.

It's quite difficult to make out the legends under the desktop icons and the colour looks washed out. You adjust the monitor using four buttons in conjunction with a row of LEDs: there's no on-screen display and no rotary controls for brightness and contrast.

Even with the best monitor in the world, graphics quality would still be held back by the Cirrus 5446 graphics card which has only 1Mb of memory, restricting the colours and resolutions available. All the other machines in the group test have 2Mb cards with more features and enhancements than the Cirrus.

The keyboard is functional enough but the review model had a rattly space bar and even the squashed-looking mouse was uncomfortable. It has two buttons that require different degrees of pressure to make them click, making it awkward to use.

The desktop case is easy to get into, but once inside it's not very well laid out. You can't fit extra RAM without first removing the hard disk drive and it's virtually impossible to use the spare 5.25in bay without removing the power supply and CD-ROM drive first, although Brother supplies a useful pack of rails and screws if you do decide to fit another drive.

A decent set of software and accessories is supplied: Lotus SmartSuite takes care of the serious stuff and there are games and an encyclopaedia, too. The Screen Beat speakers, although small, are fine for their size and have volume and tone controls.

Setting up the PC shouldn't create problems for the experienced user, but first-time buyers will not really appreciate the lack of labels on the rear sockets and connectors. **The Graduate Max 200 doesn't perform well, even when compared solely with the other 16Mb machines, but the real disappointment is in the quality of the kit itself and the way it feels in use. The rest of the system is outclassed by the 200MHz processor.**
○ £1,848.28 (inc VAT)
○ Brother: 01279 416888

Brother Graduate Max 200

Performance	★ ★ ★ ☆ ☆
Build quality	★ ★ ★ ☆ ☆
Features	★ ★ ★ ☆ ☆
Value for money	★ ★ ★ ★ ☆
Overall	★ ★ ★ ☆ ☆

Dan dantum 200

Dan's machine is fully equipped and, like the Mesh machine, is fitted with a Zip drive. These drives work like removable hard disks, accepting low-cost cartridges not much bigger than a floppy disk but able to store 100Mb of data. This makes them ideal for doing backups or transferring large files between two computers both fitted with Zip drives.

There's a fax modem installed and a reasonable multimedia system based on a 16-bit sound card. Sound emerges from a pair of tiny, powered speakers. These are adequate when used at low volumes, if somewhat tinny when you turn them up. An eight-speed CD-ROM drive and tie-clip microphone complete the multimedia line-up.

The software MPEG player works exceptionally well and there's a sample music video to try it out on. But be warned, this takes up 270Mb of the 1.2Gb hard disk, so you'll probably have to delete it before too long.

The picture produced by the Dan-badged 15in monitor, made by CTX, is good apart from a slight shimmer on the extreme right-hand side. It is controlled using an easy-to-use on-screen display with the added convenience of rotary controls for contrast and brightness, which have a wide range of adjustment settings.

We liked the German-made Cherry keyboard which has heavy keys to suit Teutonic hands. The quality of construction also extends to the heavy and well-braced case which has a small amount of front contouring to soften its boxy lines. At the back, all the sockets are clearly labelled, and inside it's neat and tidy with room to add up to three expansion cards and 5.25in and 3.5in drives.

All the software is correctly installed on the machine and, in addition to Windows 95, comprises Microsoft Works, Encarta 96 and Serif's PagePlus desktop publishing (DTP) program. Accessories and utilities for the sound and graphics systems are provided as well as three trial subscriptions to Internet service providers (ISPs). ▶

The documentation consists of the usual bundle of manuals provided by component manufacturers and there's one from Dan, which concentrates heavily on the technical features of the motherboard. **The Dan offers a lot of features even if the individual components aren't of the highest specification: no voice chips in the modem, no wavetable sound, small speakers and only 16Mb of memory. However, if you're starting from scratch and speed isn't your sole criterion, then the dantum 200 is worth considering.**
○ £1,961.08 (inc VAT)
○ Dan Technology: 0181 830 1100

Dan dantum 200

Performance	★ ★ ★ ☆ ☆
Build quality	★ ★ ★ ★ ☆
Features	★ ★ ★ ★ ★
Value for money	★ ★ ★ ★ ☆
Overall	★ ★ ★ ★ ☆

Dell Dimension XPS P200s

The Dimension XPS P200 is housed in a desktop case and has a lid that's supposed to be easy to lift off but actually tested the ingenuity of two people for several minutes. The PC is designed in a box, making it difficult to work near the sides of the case. To add a drive, for example, you have to take out the entire drive cage – a fiddly business involving removing the front panel – and it's even harder to get back in. If you do add another drive, heat dissipation shouldn't be a problem because there's a hefty extra fan at the back of the machine.

There's a lot of space inside and the expansion slots are easy to get at. The 32Mb of memory is in the form of an SD-RAM module. There's one spare socket in case you want to add more, but you

can't use ordinary single in-line memory modules (SIMMs).

Sockets on the back panel are clearly labelled with icons, which aren't as useful as worded labels but better than nothing. Fortunately, a getting-started poster explains what goes where.

Dell's own-brand Envy 15in monitor has rotary controls for contrast and brightness and the other functions are controlled by four buttons and a row of LEDs. These require a convoluted set of presses and aren't as easy to use as many other systems but the resulting image has nice inky blacks and good geometry with no distortion in the corners.

Not only is the Dimension a fast PC, it's a good performer too, with excellent sound from an AWE32 upgrade card attached to a Vibra 16 on the motherboard. The speakers provide a rich sound and there's also a large microphone that looks like it has fallen off a Karaoke machine.

Microsoft Office comes pre-installed. Other software is limited to essential utilities and accessories. The Hawkeye graphics card has a particularly good set of controls invoked from an icon on the toolbar, but having 11 tabbed sections in seven languages is perhaps a bit excessive.

Strangely, our test machine wasn't set up to use software MPEG, a task for which it would be highly suitable. Documentation is up to Dell's usual high standard, although binding all the separate manuals together wouldn't be a bad idea.
With no modem and no backup device the Dell has fewer features than some of its competitors, but to make up for this there's a massive 3Gb hard disk and valuable MS Office Pro software. Dell has produced a seriously fast machine for the serious user.
○ £1,983.40 (inc VAT)
○ Dell: 01344 720000

Dell Dimension XPS P200s

Performance	★ ★ ★ ★ ☆
Build quality	★ ★ ★ ★ ☆
Features	★ ★ ★ ★ ☆
Value for money	★ ★ ★ ★ ☆
Overall	★ ★ ★ ★ ☆

Dotlink Terminator 200i

Dotlink makes very good computers out of standard parts. While not having the resources of larger companies, it manages to combine high-quality components in well-matched combinations to produce fast, well-built PCs.

The Terminator 200i is no exception and despite exactly matching the Dell Dimension's performance it costs £300 less. It doesn't come with such an attractive software bundle, however, and it has a much smaller hard disk. In fact, Dotlink's charge to upgrade the software and hard disk would make the price identical to the
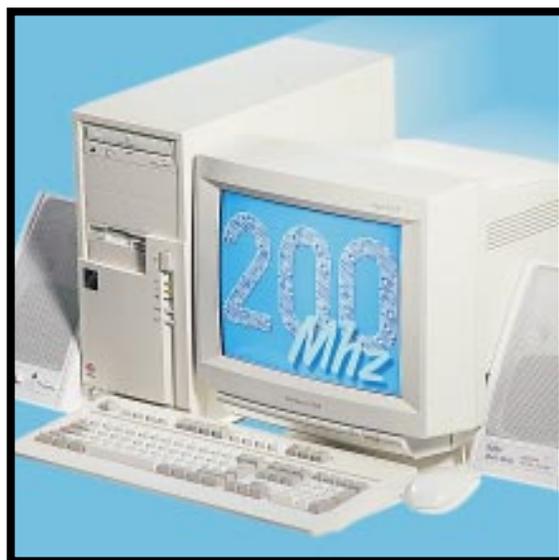
Dimension, so it's really a matter of whether you want Office Pro and a big hard disk.

The Terminator is a conventional-looking mini tower system, although the distinctive cheese-wedge speakers give it a certain rakish air. These produce a lot of sound and have a good range of bass and treble, even if they look a bit out of place. They're attached to an AWE32 wavetable sound card, with an eight-speed CD-ROM drive and a Hercules Terminator graphics card to complete the multimedia features. No microphone is supplied.

Using the Dotlink feels good. We like the expensive Fujitsu keyboard and the ViewSonic 15GS monitor is a delight to the eyes. It features an exceptionally straightforward on-screen display system, a flat screen, stable picture and very good colour density and brightness.

Inside the system unit there's room for expansion and everything is tidily arranged. Should you need to add extra drives, four bays are free, two of each size, and three expansion slots are available for controller cards. The Dotlink is ideal for the hobbyist or experimenter ▶

because the entire motherboard and expansion card assembly pulls out on rails, so if you're always adding bits to your PC you'll like it.

Documentation is limited mainly to component manuals and there's no getting started guide, although all the connectors are clearly labelled. All the software is properly installed and a full range of driver disks is supplied.

A good, no-frills performer with the added advantages of easy upgrading, quality components throughout and an extensive range of upgrade options to allow you to tailor the Terminator precisely to your needs.
○ £1,687.30 (inc VAT)
○ Dotlink: 0181 902 5802

Dotlink Terminator 200i

Performance	★ ★ ★ ★ ☆
Build quality	★ ★ ★ ★ ☆
Features	★ ★ ★ ☆ ☆
Value for money	★ ★ ★ ★ ★
Overall	★ ★ ★ ★ ☆

Evesham Vale Platinum HX 200

The Evesham Vale Platinum HX 200 performs almost as well as the machines from Dell and Dotlink, the slight difference probably being accounted for by its smaller amount of cache memory: only 256K instead of 512K.

Impressions are good from the start because the PC comes in three extremely protective boxes. Two hold the system unit and monitor and the third is a box of goodies containing a pair of powerful, amplified ZY-FI 2 PRO speakers, a Microsoft SideWinder joystick and a bundle of software. There's Works, Money, Golf and Encarta 96 for everybody's use and Fine Artist, Explorapaedia, Fury and Dinosaurs for the kids. Unfortunately, none of this is pre-installed on the hard disk.

Despite having to install your own applications, Windows 95 and all the essential bits of supporting software are already set up for you. There's a very nice games prompt you can click on to drop out of Windows to a special DOS session optimised for games playing, and although no modem is bundled with the PC, Internet access is installed, as are trial subscriptions to service providers.

The construction quality and internal layout of the midi tower case are exemplary. It is opened with a single key lock and is very easy to work on inside. External peripherals include a sturdy Key Tronic keyboard, a Microsoft Mouse and a fine monitor with built-in speakers (if you don't need the volume of the external ones).

The GoldStar StudioWorks 56m monitor has on-screen controls and sockets for a microphone and headphones. The picture it produces is solid, bright and clear, and it has a fairly wide range of brightness and contrast adjustments.

The documentation is a collection of component manuals in a ring binder and there's also a Vale guide which is particularly good at telling you how to set up and use the computer. A nice touch is a full set of guide rails, screws and fittings for upgrading.

The Platinum HX 200 is good to look at and easy to use. At close to our price ceiling of £2,000 it would be nice to have the software installed and to get a modem thrown in. These criticisms aside, it's hard not to like this PC.
○ £1,998.85 (inc VAT)
○ Evesham Micros: 01386 765500

Evesham Vale Platinum HX 200

Performance	★ ★ ★ ★ ☆
Build quality	★ ★ ★ ★ ★
Features	★ ★ ★ ☆ ☆
Value for money	★ ★ ★ ☆ ☆
Overall	★ ★ ★ ★ ☆

Evolution ev-P200XL

This solidly built desktop computer is distinguished by being the only one in the group to adopt the Cyrix 6x86 processor in preference to the Pentium, a decision justified by its position at the top of our performance table.

However, performance isn't simply a matter of picking the right processor. Evolution has also fitted 32Mb of RAM, 512K of cache memory, a 2.1Gb IBM hard disk and an STB Lightspeed graphics card, all of which provide strong support to the Cyrix chip.

A Sound Blaster 32 card drives a pair of attractive Aiwa-powered

speakers. Unfortunately, they don't sound quite as good as they look because they are subject to vibration at high volumes.

Other external peripherals are first class, from the Fujitsu keyboard to the CTX monitor. The monitor uses six pairs of buttons to control size, positioning and geometry, with rotary controls for brightness and contrast. Although the colours aren't particularly vibrant, the picture is stable, well-focused and small fonts are very easy to read.

Potential upgraders should note that the motherboard doesn't have a secondary IDE channel so the CD-ROM drive is attached to the same cable as the hard disk. The MR BIOS on the motherboard is modified to accept this arrange-

ment without the usual degradation in hard disk performance.

All the software is pre-installed and we were very impressed with the software supplied to play MPEG videos. Manuals are provided for most of the components and software, apart from the Trio communications centre which comes with disk-based instructions. In conjunction with the Lasat internal voice modem, Trio provides a very sophisticated fax, voicemail and data communications system.

Evolution's own manual is a generic guide to installing the PC and isn't as clear as the excellent example provided by Evesham, but the clear labelling of everything on the back of the PC is a help.

Small but nice touches include the provision of a PS2 mouse, leaving both serial ports free, and an extra button for track selection on the CD-ROM drive.

The Evolution ev-P200XL comes with everything you could want apart from a backup device, but the change you get out of £2,000 is enough to buy a ▶

Zip drive. This machine is a knockout provided you aren't afraid to leave Intel's Pentium fold.
◯ £1,844.16 (inc VAT)
◯ Evolution: 0181 944 6222

Evolution ev-P200XL

Performance	★ ★ ★ ★ ★
Build quality	★ ★ ★ ★ ☆
Features	★ ★ ★ ★ ☆
Value for money	★ ★ ★ ★ ★
Overall	★ ★ ★ ★ ★

Gateway P5-200

Visitors to the *What PC?* labs commented on how nice the Gateway looks. This is partly due to its unusual styling and colour (a sort of off-white tending towards grey) but also a tribute to its powerful speaker system with impressive looking sub-woofer unit.

Its performance is the best of the 16Mb machines tested and the sound system is certainly impressive: good enough to use as a home entertainment centre and for playing audio CDs. Although the other peripheral devices aren't quite in the same league, they're certainly good enough for the job. We have no complaints about the Microsoft Mouse, and Gateway's own keyboard is sturdy and serviceable.

The monitor, however, is questionable. Vivitron monitors vary widely in terms of picture quality and interference caused by vibration. Our review model produced an exceptionally good picture with rich colours and plenty of brightness and contrast. In this respect it's possibly the best 15in Vivitron we've seen. However, it is subject to vibration – just dropping the flap covering the control buttons induces screen shimmer. This won't be a problem provided you keep the sub-woofer well away from the desktop.

Removing the casing is a bit of a struggle, but once inside there's plenty of room to work and every-

Pentium futures

With processor technology leaping forward all the time, it's fair to ask whether today's top-of-the-range Pentium 200MHz processor will soon be overshadowed by a new or improved version.

Intel claims it has no plans to increase further the speed of the standard Pentium. However, a variant of the chip, called the P55C or Pentium MMX, is already in the hands of some system builders for testing and Intel claims the processor is 10 to 20 percent faster than a standard Pentium and up to 60 percent faster at some communications and multimedia-related tasks.

Technically, the existing Pentium design could be boosted to run internally at higher speeds, but it's not certain that Intel will wish to follow this path, particularly as Cyrix intends to sell an MMX version of its 6x86 processor. The battle over speed and performance is more likely to be waged in the MMX arena, and the chances are that Intel will fight off Cyrix's challenge to the Pentium by reducing prices, rather than increasing chip speeds.

Whatever strategy Intel follows, there is no sign that the Pentium will be superseded by a new type of chip that will make the existing ones obsolete overnight: the new MMX chip fits into a standard Pentium socket.
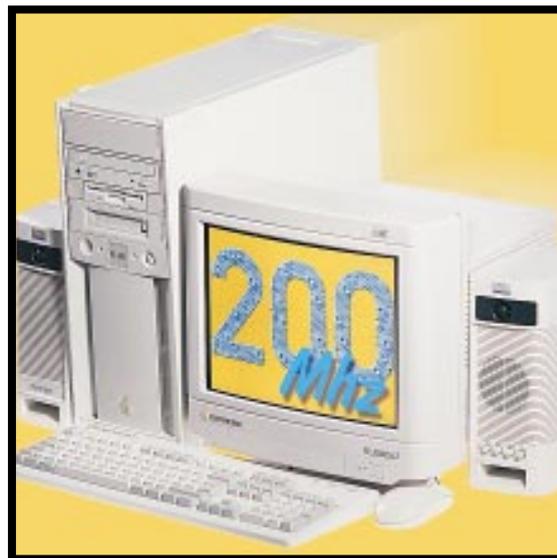
thing is neatly secured. SD-RAM is installed in one socket and there's another free for the inevitable upgrade to 32Mb.

Despite the Iomega Ditto tape backup unit taking up a 5.25in drive bay, there's another one free if you want to add an extra drive. The Ditto tape drive can store up to 3.2Gb of data on a single tape (one

is supplied) which is more than enough to cope with the P5-200's 2Gb hard disk.

All the software is pre-installed and the manuals, CDs and disks are separately shrink-wrapped. Find the Getting Started pack first: there's a poster inside telling you how to get up and running.

The P5-200 is an attractive proposition, especially if you're prepared to upgrade the memory. In these wired and connected times, general users might find the inclusion of a sophisticated tape backup unit less useful than a modem, which is a surprising omission.
◯ £1,930.51 (inc VAT)
◯ Gateway 2000: 0800 552000

Gateway P5-200

Performance	★ ★ ★ ☆ ☆
Build quality	★ ★ ★ ★ ☆
Features	★ ★ ★ ★ ☆
Value for money	★ ★ ★ ★ ☆
Overall	★ ★ ★ ★ ☆

Mesh Elite 200 FireBlade

The Mesh has every essential component, and quite a few extras, as standard. All are housed in an extra-wide midi-tower case that looks squat but pleasing if you've got room for it on your desk or table.

Like the Dan machine we tested, the FireBlade is fitted with an Iomega Zip drive, although this one is finished in royal blue rather than PC beige. The extra width of the case isn't used inside, apart from providing plenty of ventilation, and the motherboard is rather cramped at one end of the case.

There are only two PCI slots free because the internal modem is bulky and the Zip controller takes up an expansion slot. A 3.5in drive could be fitted, but you'd have to re-route some of the existing cables. ▶

Cyrix instead

Cyrix 6x86 processors aren't true Pentiums but they are designed to work like Pentiums and in many respects are more efficient at carrying out common types of instruction. The fastest Cyrix 6x86 chip, the P200+, as fitted to one of the machines in our group test, is actually a 150MHz processor designed to work slightly better than a Pentium 200, hence the plus designation – it's a Pentium 200 plus a little bit more.

Our results, and other independent tests, seem to bear this out. However, there is a question mark over the Cyrix's performance when carrying out floating point arithmetic (fractions). Although the floating point unit is the same size as in a true Pentium, it has been reported to work at about half the speed.

This only affects a minority of programs, such as 3D games and specialist 3D graphics software. Ordinarily, Windows programs make little use of floating point arithmetic so the disappointing performance of the Cyrix in this one respect is not significant for the majority of users.

The 6x86 P200+ chips are manufactured by IBM to Cyrix's design and a version carrying IBM's name is also on sale. The IBM processor is, in every respect, identical to the Cyrix product.

On the outside, a pair of small Altec Lansing speakers with volume and treble controls provides sound generated by the AWE32 card. This is a good system if kept at a moderate volume. The monitor is a definite plus point. Made by ADI, it performs well, producing a picture adjustable to all tastes. It also has a very flexible and simple control system employing four buttons and a row of LEDs, with rotary contrast and brightness knobs.

Looking at the components inside the FireBlade it's difficult to see why it comes bottom of our performance table. The unit's only unique items (those not used by the other machines in the group) are the hard disk and motherboard, so the fault must lie with one of these. Boosting the RAM to 32Mb will make a big difference but it certainly won't push the FireBlade to the top of the chart.

Three bulging wallets contain stacks of manuals, CDs, driver disks and a blank cartridge for the Zip drive. Lotus SmartSuite, while not Microsoft Office, is a reasonable second best and it comes properly installed and ready to use. Mesh produces a fairly helpful generic manual for all its machines and the sockets on the back of the machine are clearly labelled.

The machine that has everything – apart from performance. This having been said, the Mesh is a sound, well-equipped machine if you're looking for its particular combination of features.

◯ £1,996.33 (inc VAT)
◯ Mesh Computers: 0181 452 1111

Mesh Elite 200 FireBlade

Performance	★ ★ ★ ☆ ☆	
Build quality	★ ★ ★ ★ ☆	
Features	★ ★ ★ ★ ★	
Value for money	★ ★ ★ ★ ☆	
Overall	★ ★ ★ ★ ☆	

TAG Tagpro 200

TAG didn't fit its machine with a sound card or speakers, although it does have an eight-speed CD-ROM drive. TAG explained that only 'serious' business users would buy a Pentium 200MHz PC and they wouldn't need multimedia. Well, they do, not only to get the most out of modern software, which often includes multimedia elements, but also to get full use of the Internet, for which TAG sensibly supplies a 28,000 bits per second (bps) modem.

To be fair, instead of pocketing the money it saved on multimedia features, TAG has spent it on a 3.2Gb Seagate Travan tape drive and a separate Seagate controller to increase backup speeds by 50 percent over connection to a floppy disk controller

The graphics card is a VideoLogic GrafixStar 600, which comes with a flexible set of utilities, and uses a TAG-badged monitor. This has eight push-button controls along the bottom edge. Four of these work in conjunction with the on-screen display to provide a good range of geometric adjustments; the other four are for brightness and contrast. The on-screen display can report the vertical frequency of the monitor to make sure you're using the best display mode. The image is perfectly acceptable; very sharp but not especially vibrant.

Inside the PC it's reasonably tidy, but there's a cluster of cables near the drives. However, it's easy to get inside the case and you can fit an extra drive in the 5.25in bay without removing the power supply.

Microsoft Works and Windows 95 are supplied on CD and come with slim manuals. Works had not been installed on our test machine, although Seagate's backup scheduler had, and the tape drive was set up and ready to use.

TAG's user guide contains only four pages about setting up the computer, reinforcing the impression that this machine is aimed at people who know what they're doing. Peripherals include a Microsoft Mouse and a decent small-footprint keyboard from Key Tronic. Although TAG has gone to the trouble of fitting a separate PS2 mouse port, a serial mouse was supplied, taking up one of the two serial sockets unnecessarily.

Slowest of the 32Mb machines, yet still no slouch, the TAG is a very competent computer. However, it doesn't seem to fill any special niche or offer facilities beyond the general run of 200MHz Pentiums.

◯ £1,968.13 (inc VAT)
◯ TAG PC Technology:
0181 803 7770

TAG Tagpro 200

Performance	★ ★ ★ ★ ☆	
Build quality	★ ★ ★ ★ ☆	
Features	★ ★ ★ ★ ☆	
Value for money	★ ★ ★ ★ ☆	
Overall	★ ★ ★ ★ ☆	

Viglen Ultimate 200 plus

The Viglen Ultimate 200 plus is based on the Viglen Contender ATX P5/200 and has a modem and a stylish multimedia sound system. It's a system that makes few compromises to sell for less than £2,000 and, apart from a backup device, it has everything you need.

The system unit is a medium-sized tower case with rounded sides to make it look slightly less severe. Inside there's a spare drive bay of each type, both with front access. The ATX motherboard, from which the Viglen gets its name, is designed for ease of access and flexibility so there are three PCI expansion slots and one 16-bit slot, all readily accessible and able to take full-length cards.

Already fitted are a Dataflex voice modem with all the software you need to use it and an integrated wavetable sound system. This feeds a pair of tall, powered Yamaha speakers and a separately powered sub-woofer unit. Viglen's monitor also has two speakers built into it, although they're pretty feeble compared to the external units.

The monitor itself is fine. Although the picture isn't as sharp as some of its rivals and the range of contrast is limited, it's comfortable to use for long periods and has a good on-screen control system as well as three rotary knobs, one of which usefully adjusts the volume.

The keyboard is well made and ▶

Pentium 200s compared

Manufacturer	Brother	Dan	Dell	Dotlink	Evesham	Evolution	Gateway	Mesh	TAG	Viglen
Model	Graduate Max 200	dantum 200	Dimension XPS P200s	Terminator 200i	Platinum HX 200	ev-P200XL	P5-200	Elite 200 FireBlade	Tagpro 200	Ultimate 200 plus
Price	£ 1,848.28	£ 1,961.08	£ 1,983.40	£ 1,687.30	£ 1,998.85	£ 1,844.16	£ 1,930.51	£ 1,996.33	£ 1,968.13	£ 1,941.37
Processor	P200	P200	P200	P200	P200	Cyrix P200+	P200	P200	P200	P200
Main RAM	16Mb EDO	16Mb EDO	32Mb SD	32Mb EDO	32Mb EDO	32Mb EDO	16Mb EDO	16Mb EDO	32Mb EDO	32Mb EDO
Graphics RAM	1Mb	2Mb	2Mb	2Mb	2Mb	2Mb	2Mb	2Mb	2Mb	2Mb
Cache	256K	512K	512K	512K	256K	512K	512K	512K	512K	256K
HDD	1.2Gb	1.2Gb	3Gb	1.2Gb	2Gb	2.1Gb	2Gb	1.7Gb	2.5Gb	2Gb
CD-ROM	8-speed	8-speed	8-speed	8-speed	8-speed	8-speed	8-speed	8-speed	8-speed	8-speed
Sound card	Vibra 16	SB16	AWE32	SB32	Vibra 16	SB32	Vibra 16	AWE32		Built-in wavetable
Monitor	15in	15in	15in	15in	15in	15in	15in	15in	15in	15in
Modem (bps)	28,800 voice	28,800				28,800 voice		33,600 voice	28,800	28,800 voice
Backup	None	Zip drive	None	None	None	None	3.2Gb tape	Zip drive	3.2Gb tape	None
Software	Win 95, Lotus SmartSuite, Encarta 96 and four CD games	Win 95, MS Works, Encarta, PagePlus	Win 95, MS Office Pro	Win 95, MS Works, Money, Encarta, Creatures or Lotus SmartSuite	Win 95, MS Works, Money, Encarta and 5 other CD titles	Win 95, MS Works and Money	Win 95, Quicken, 5 CD games plus MS Generations CD collection	Win 95, Lotus SmartSuite	Win 95, MS Works	Win 95, MS Golf, Works, Publisher, CRT Easy Tutor and more
Speakers	2	2	2	2	2	2	2 + sub woofer	2	0	2 + sub woofer
Other	Joystick	3 x 100Mb Zip cartridges			Joystick plus MS Fury					
Warranty	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year	2 years	1 year

Speed tests

- Mesh
- Brother
- Dan
- Gateway
- TAG
- Viglen
- Evesham
- Dell
- Dotlink
- Evolution
- Compaq
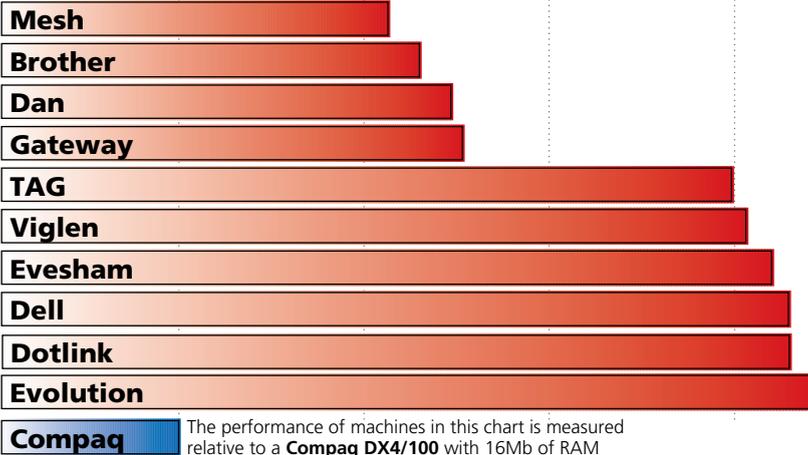
The performance of machines in this chart is measured relative to a **Compaq DX4/100** with 16Mb of RAM

NOTES: NSTL benchmarks from which this chart was generated were performed in the *What PC?* VNU Labs. In all tests, a longer bar indicates better system performance.

the UK's longest-established PC vendors.

○ £1,941.37 (inc VAT)
○ Viglen: 0181 758 7000

Viglen Ultimate 200 plus

Performance	★ ★ ★ ★ ☆
Build quality	★ ★ ★ ★ ☆
Features	★ ★ ★ ★ ☆
Value for money	★ ★ ★ ★ ☆
Overall	★ ★ ★ ★ ☆

BEST BUY — WHAT PC?

Choosing the best buy was easy because the top performer, the Evolution ev-P200XL, is also the best value. It's well put together, equipped with high-quality components, fully configured and ready to start earning its keep from the moment you plug it in.

RECOMMENDED — WHAT PC?

All the PCs have something to commend them and the best machine for you will depend very much on exactly what set of features you need. We're giving equal recommendations to the **Dell Dimension XPS P200s** and the **Viglen Ultimate 200 plus**: to the Dell for performance, disk capacity and its MS Office Pro software; to the Viglen for providing the best all-round balance of performance, features and accessories.

Paul Wardley

has a positive key action. All the ports are clearly labelled on the back of the machine and setting up is straightforward. You have to finalise the installation of Windows when you first use the machine and you're then presented with a video guide to Viglen and your PC. A nice touch is that when you close down the video you are presented with the control utility for the display which you'll need to use the first time you set up the system.

All the software is pre-installed and Viglen has included an Easy Access group of icons containing the most frequently required control buttons. **The Viglen Ultimate 200 plus is a well-made machine with no weak points. Although this isn't the fastest PC in this group, it has the backup of one of**