



The mid-point of PC sales is around **£999**, and at this price you can buy a powerful, mainstream machine for serious and leisure work. We rate the best

Bigger, better faster?

Group test: PCs from £999 (ex VAT)

The mainstream price point for PCs used to be around £1,300, but with the continuing battle to force costs ever lower, that point has dropped now to around £999 ex VAT. So we're looking at a dozen machines which hit this price and offer a variety of configurations. With £999 to spend, you can expect a PC suitable for just about any task you might ask of it in the home, from word processing and desktop publishing to DVD playback and multimedia to games of all sorts. These are machines with a good all-round pedigree.

This amount of price leeway means producers can vary the component mix quite a lot. They can go for fast processors – we have 800MHz machines in this group – add a lot of memory – 128MB is the norm here – and look at including high speed graphic accelerators. There's room for hi-fi level sound systems, TV tuner cards, wireless keyboards and mice and plenty of other refinements. Some systems come with printers and others with scanners, too.

With such scope for different configurations, one of the most important aspects we'll be looking at is compatibility – how all the components fit and work together. There's little point in throwing in extras if they're of much lower usefulness than the main PC system itself. Similarly, within the machine itself there needs to be a balance between processor, graphics card, memory, hard drive and monitor. Any of these parts significantly below the others in specification or quality can destabilise the whole package – a bit like fitting retreads to a new Porsche.

So here are a devilish dozen of the best the PC business can offer. There are some great systems here and very few you should pass by without a second look.



ADDITIONAL EXTRAS

PCs vs PC systems

Are PC systems better value?

Although we requested PCs – system unit, monitor, keyboard, mouse and speakers – at the £999 price point, several companies couldn't resist the temptation to include other extras, such as printers and scanners in the systems they submitted. While we haven't penalised any companies for this, we have looked carefully at the system overall to check the balance.

There's obvious potential for extra value in buying a complete system rather than a PC alone, as long as in adding the peripherals, a supplier doesn't neglect the core system itself. If the machine has a lower clock-rate processor,

smaller memory, hard drive or monitor, then the extra devices may not be that much of a bargain. You may have particular tasks in mind for which general purpose peripherals aren't ideal.

Another thing to bear in mind is that peripherals can be make-weights. Companies with large turnover's can negotiate very low prices on what are already entry-level printers and scanners and these may not come up to the standard of the rest of the system. We don't have any evidence of this in the systems supplied here, but it's something to watch when looking at flashy advertisements – the word 'printer' covers a host of different devices.



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AVANTI



M400

Well made, but doesn't stand out in any way. Its specification gives it the feel of a cheaper machine

■ PRICE £1,174 ■ EX VAT £999 ■ SUPPLIER Avanti ■ PHONE 08707 551000

Avanti, now part of the SSC group, produces a wide range of workmanlike PCs. This m400 machine uses a substantial and wider-than-normal case to house its workings. There's a 10-speed Panasonic DVD drive in the top bay and a 3.5-inch floppy drive below that, but no option for medium/high capacity removeable storage – the machine could do with a Zip, Superdisk or CD-RW to handle this.

Inside, there's a 19GB Samsung hard drive, which is a healthy enough capacity, but it is only average in this group. The processor runs at 750MHz but, since it's a Pentium III, it doesn't offer the same kind of performance as, say the 750MHz Athlon in the Carrera. In fact, the SYSmark result is over 15 per cent lower than from the 700MHz Athlon in the Evesham machine which shows just how good AMD's Athlon is.

This can't be put down to a lethargic graphics adaptor either, since the Avanti machine uses a generic 32MB nVIDIA GeForce 256 card, much the same as used by several other suppliers and currently one of the fastest cards around. It runs it into a 17-inch Smile monitor which, although a less expensive brand, gave a fair picture and reasonable clarity at a resolution of 1,024x768.

There are two ISA expansion slots available and two of four PCI ones also free. The other two take a V90 hardware channel from HSP and a SoundBlaster Live! Value sound card. This runs its four channels into a set of PC Works speakers for environmental sound – good for games.

Keyboard and mouse are both fairly indifferent, unnamed devices from Taiwanese sources. That said, the mouse is comfortable enough and the Turbo-Jet keyboard has a good key feel and four extra keys to control suspend and power modes.

There's no application software supplied with the machine, just the usual utilities for DVD, modem and sound and the warranty is for five years, with the first on-site and remaining four back to base, labour only.

This isn't a bad machine: it worked reliably and is well put together. However, when you compare it with what's available elsewhere, it's rather lacklustre in both specification and performance. You can get better value than this for £999.

PC Plus

VERDICT

AVANTI M400

System unit	7
Keyboard & mouse	7
Video system	7
Performance	6
Bundles & warranty	6
Value for money	6

6/10

CARRERA



OCTAN M750

A well-mannered machine with some useful extras, like TV playback and twin DVD/CD drives

■ PRICE £1,199 ■ EX VAT £1,020 ■ SUPPLIER Carrera ■ PHONE 0208 3072800 ■ WWW www.carrera.co.uk

Carrera's Octan 750 offers several novel takes on a PC in this price range. For a start, it includes the twin DVD/CD-RW arrangement which gives flexible playback and back up off most kinds of silver disc. Then there's TV playback on your PC screen, through a tuner card.

The seven drive-bay midi-tower case has plenty of room for expansion, even with a 3.5-inch floppy below the CD drives and its final device, a 19GB Fujitsu hard drive, fitted internally.

Carrera fits an Athlon processor, a popular choice in this group, though the clock-rate, 750MHz, was faster than most. It's supported by 128MB of main memory, more than enough for today's applications, and the system board has three PCI expansion slots and both ISA slots free for upgrade. The sound card is a worthwhile SoundBlaster Live! Value and runs into a five speaker ACS54 set from Altec Lansing. These are excellent speakers for the price and outstrip the performance of the PC Works set in dynamic range and bass response.

Carrera decided to split its budget for graphics between a reasonable Riva TNT2 graphics adaptor, Guillemot's Maxi Gamer, and a TV tuner card from Hauppauge. This provides the extra facility of displaying TV full screen or in a Windows frame and, assuming you have a handy aerial feed, is a useful extra. Your PC can become a second TV to get around programming arguments (*Buffy the Vampire Slayer* or *Spotlight South West* – the choices, the choices).

PC and TV pictures are displayed on a 17-inch Iiyama monitor, which gives a good picture, though not up to the clarity of Iiyama's more expensive VisionMaster range. The four push-button controls are easy-to-use with the on-screen display.

The Key Tronics keyboard and Microsoft mouse are a very good match and they both provide comfort and accurate control.

Carrera has introduced an eight program software package, including several BBC-based titles like *Changing Rooms* and *Telly Tubbies* and adds this to the usual SmartSuite Millennium offering. Overall, this is a good system with a handy performance, well up with the rest of the pack. It should be in a similar place on your short list.

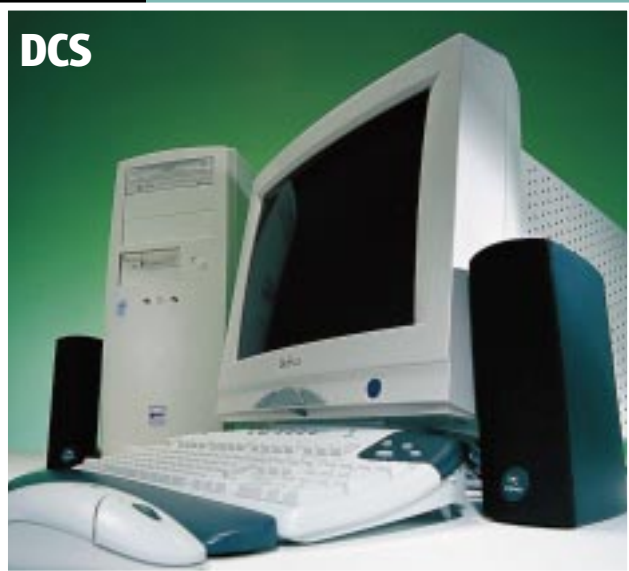
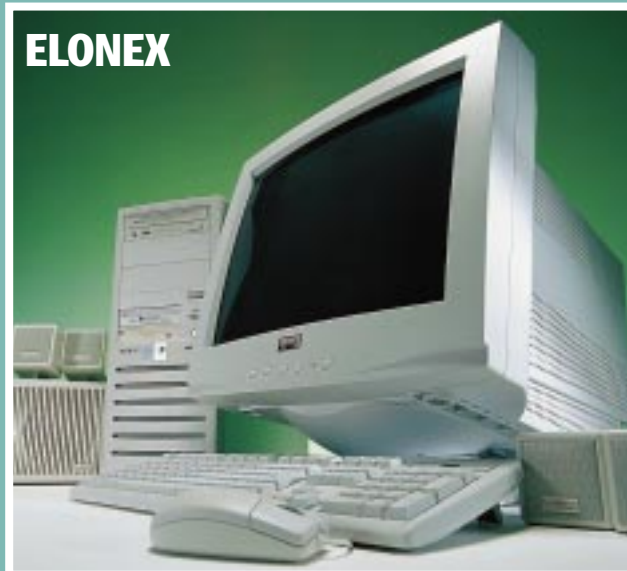
PC Plus

VERDICT

CARRERA OCTAN M750

System unit	9
Keyboard & mouse	9
Video system	8
Performance	8
Bundles & warranty	7
Value for money	8

8/10

**PC Plus****DCS****ADONIS****Strong graphics and convenient keyboard and mouse, but awkward combo DVD/CD-RW drive****ELONEX****WEBRIDER****This offers a lot, including a big screen, Zip drive and useful All-in-Wonder graphics card**

PRICE £1,174 ■ EX VAT £999 ■ SUPPLIER DCS ■ PHONE 0121 4147575 ■ WWW www.getinteractive.co.uk

DCS is based on the campuses of Birmingham and Loughborough universities and sells to a lot of students, so should know a bit about providing good value. This Adonis system includes a couple of innovations which increase its usability, particularly when it comes to multimedia and games.

The midi tower case contains just one CD-style drive, a combination DVD and CD-RW unit from Ricoh. This works well enough, though it can take a while to recognise the type of disc you've fed it – the review sample was especially unsure about reading the CD-Rs from which we load our test programs.

There's a standard floppy on the front panel too and a 17GB Samsung hard drive on the inside. Like many of the other suppliers, DCS bases its machine on an Athlon processor, this one running at 650MHz. It comes with 128MB of memory on an Asus system board which can take up to 1.5GB. The memory is to the more expensive 133MHz standard, and it seems a bit odd to use this with a comparatively slow processor.

There are no ISA expansion slots on the system board and two of the five PCI ones are taken up by a Conexant V90 hardware modem and a SoundBlaster Live! Value sound card. This is a four channel sound card, though here it drives a diminutive pair of Logitech speakers. These give a fair sound for their size, though the treble is rather muted.

One of this machine's main claims to fame is its graphics card. It uses a Creative Annihilator GeForce 256 card, with 32MB of DDR memory. This gives the machine a good turn of speed in 3D games, though oddly the games segments in the 3DMark benchmark were jerky and hesitant. In order to test this, we ran Quake III and had no problems with this program. The SYSmark benchmark was slower because of the lower clock-rate processor.

DCS provides a fair Belinea 103040 monitor, which is nominally a 17-inch unit, but has a screen diagonal of just 15.5 inches. The keyboard and mouse are wireless units from Logitech, which give you extra flexibility. Overall, the machine is good, but with a couple of rough edges.

PC Plus**VERDICT****DCS ADONIS**

System unit	7
Keyboard & mouse	8
Video system	9
Performance	8
Bundles & warranty	6
Value for money	7

7/10

PRICE £1,251 ■ EX VAT £1,065 ■ SUPPLIER Elonex ■ PHONE 0800 0374465 ■ WWW www.elonex.co.uk

Elonex has taken to giving its machines range names without model numbers, apparently to help prevent peer envy in offices: "Why can't I have a Pentium III like Jim in accounts?" If you want a WebRider like this, just mention *PC Plus* issue 165 and Elonex should know what you mean.

There are several good reasons for wanting a WebRider. It has a good big screen, a fast processor and a flexible graphics system. It's built into one of Elonex's midi tower cases, too, so there's more room for expansion than in several of the company's recent machine we've reviewed.

Elonex starts with a 10-speed Acer DVD drive in the top bay, and fits a Zip 100 drive as well as a floppy lower down, for medium as well as low capacity back-up storage. Inside there's a 19GB Fujitsu hard drive, running from a UDMA 66 controller, with a theoretically higher transfer rate than the older UDMA 33.

133MHz memory is faster on paper than PC100, and is fitted here. However, the performance results we saw showed little advantage. There's 128MB fitted, backing up an 800MHz Pentium III processor.

There's no card in either ISA expansion slot, but one of the five PCI slots contains a US Robotics 56K modem. Sound comes from a SoundBlaster 128 chip on the system board and runs into a set of PC Works speakers. This is bizarre, as you can only use two of the four satellites speakers supplied with this sound card.

Elonex provides an ATI All-in-Wonder 128 sound card, which gives passable 3D and has a lot of scope for video editing with a good range of different inputs. The 19-inch Elonex monitor provides a fair picture, though the shadow mask is quite noticeable, giving a grainy appearance to the display.

Performance was average for an 800MHz Pentium III, but wasn't spectacular when you compare it with, for instance, Evesham's 700MHz Athlon. The All-in-Wonder card doesn't pull its weight as well on the 3DMark test, but has less effect on the SYSmark results.

Elonex bundles a full copy of SmartSuite Millennium with this machine and, overall, it's a fair system with plenty in its favour.

PC Plus**VERDICT****ELONEX WEBRIDER**

System unit	8
Keyboard & mouse	7
Video system	8
Performance	8
Bundles & warranty	7
Value for money	8

8/10



ATHLON GEFORCE

This combines quality components for a well-balanced, high-performance system



PERFORMANCE 700

Its performance makes it hard for Gateway to justify the price tag

■ PRICE £1,199 ■ EX VAT £1,020 ■ SUPPLIER evesham ■ PHONE 0800 0380800 ■ WWW www.evesham.com

Evesham Micros, now known as Evesham.com, has produced a well-balanced PC which will suit games players and serious users equally well. One of the first things you notice is the combo drive in the top drive bay. This Samsung device can read and write all varieties of CD and play back DVDs as well. It recognises discs a sight quicker than the Ricoh combination drives, too.

There's a standard floppy drive below this and a 19GB Maxtor hard drive inside for a good storage bundle all round. A 700MHz Athlon processor sits in a Microstar system board, which provides four DIMM sockets with a high upgrade capacity of 1GB. 128MB of 100MHz SDRAM is fitted here.

Evesham fits a Diamond Supra hardware modem and a SoundBlaster 128 sound card to two of six PCI expansion slots, leaving plenty of room for add-ins. The sound card drives a pair of Creative SB552 speakers, which are nothing special.

Graphics are provided by an nVIDIA GeForce 256-based adaptor, made by Chaintech, best known for its system boards. This 32MB card runs a 17-inch Taxan monitor, from the low-cost ValueVision range. This isn't a bad monitor, but the tube face is more rounded and the shadow mask more prominent than more expensive displays.

Performance is interesting, because the 700MHz Athlon processor and GeForce 256-based graphics card managed the same *PC Plus* Index of 10.24 as the 800MHz Pentium III and ATI All-in-Wonder 128 combination in the Elonex WebRider. This shows how a strong graphics card can boost the overall performance of a system, but also shows again that the Athlon is a better performer than the Pentium III.

When it comes to the 3DMark benchmark, though, the Evesham machines pushes well ahead, with indexes of 6,903 and 6,563 at low and high resolutions. This should make the Evesham an excellent vehicle for games.

There are three games bundled with the Athlon GeForce, but none are this year's releases. There's also a copy of SmartSuite Millennium and a couple of compilations, from Penguin and GSP. Altogether, this is a good machine, with sensible choices of drive and graphics card, balanced by a lower value monitor.

PC Plus

VERDICT

EVESHAM.COM ATHLON GEFORCE

System unit.....	9
Keyboard & mouse.....	7
Video system.....	9
Performance.....	10
Bundles & warranty.....	8
Value for money.....	8

9/10

■ PRICE £1,102 ■ EX VAT £938 ■ SUPPLIER Gateway ■ PHONE 0800 142000 ■ WWW www.gateway2000.co.uk

Gateway used to be a company you could guarantee would offer some of the best value available in new PCs. Looking at this Performance 700, though, our first thought was how the company managed to charge £938 for it. It's based around a 700MHz Pentium III, which isn't one of the faster processors in the group and couples it with a 16MB Voodoo3 3000 graphics card. This is a quick 3D card, but is only capable of 16-bit colour in 3D accelerated mode.

The Voodoo card works with one of Gateway's 17-inch EV700 monitors, which is not a Trinitron device, though the picture it produces is fair. Even small characters are reproduced clearly and colour is balanced and natural.

So far, though, there's little to justify the £938 price tag. How about drives? Again Gateway has gone for a pretty minimalist configuration, with a straight 10-speed Toshiba DVD drive, a standard floppy and a 19GB Western Digital hard drive. While this setup works well, there's no CD-RW or Zip drive, which doesn't stand up well with the seven other machines which include one or the other.

There's 128MB of main memory, but it would be very surprising if there wasn't in this company. The five expansion slots on the Intel system board contain a 56K modem and a SoundBlaster 128 card – an old design only supporting stereo speakers. In this case, it's a pair of quite large, but not very effective Cambridge SoundWorks devices, with no sub-bass driver.

Performance was uninspiring. The 700MHz Pentium III produced a *PC Plus* index of 8.86, below average for the group. 3DMark indexes were further up the pack, though remember that the Voodoo card only runs at 16-bit colour depth, a distinct advantage on the low resolution test.

Gateway bundles a copy of Works Suite 2000, which is a worthwhile package including AutoRoute, Money, Home Publishing and Encarta Atlas, as well as Word and Works itself. There's also a copy of IBM ViaVoice, so you can practice voice recognition. Along with this decent software bundle Gateway includes a good three year warranty, however these don't dispel the overall feeling that value here is a little low.

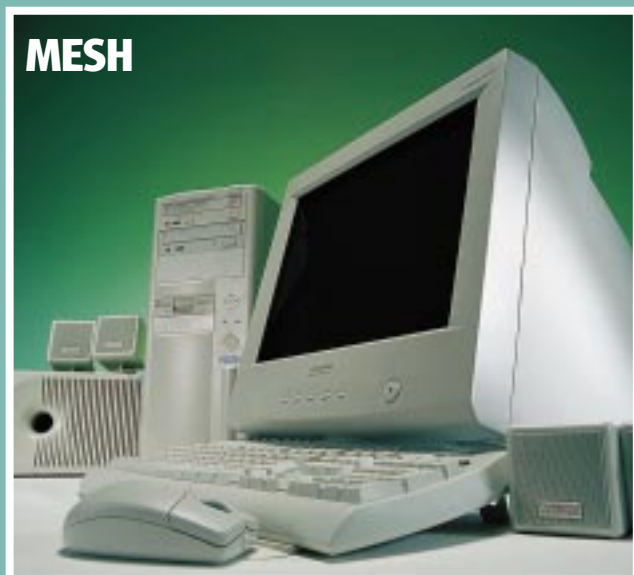
PC Plus

VERDICT

GATEWAY PERFORMANCE 700

System unit.....	7
Keyboard & mouse.....	8
Video system.....	7
Performance.....	7
Bundles & warranty.....	8
Value for money.....	6

7/10



MESH

MATRIX 700P

This is another good machine with excellent graphics and drives



NEC

DIRECTION SM733VP

NEC Direction Sm733VP seems to have clicked, as far as its graphics and main processor are concerned

■ PRICE £1,198 ■ EX VAT £1,020 ■ SUPPLIER Mesh ■ PHONE 020 82084705 ■ WWW www.meshplc.co.uk

Mesh continues to refine the component mix of its systems and this Matrix 700P PC has some very useful features, starting with the dual CD drives in its front panel. There's a 10-speed Pioneer DVD drive and, directly below, a TEAC CD-RW. As delivered, both of these were set as master devices, meaning only one was recognised by the system – Mesh should have spotted this.

Inside, behind a 19.1GB IBM hard drive, the last storage device is a 700MHz Athlon processor with 128MB of PC100 memory. The Microstar system board isn't capable of running the faster 133MHz DIMMs. However, we've yet to notice much difference between the two memory speeds.

There are six PCI expansion slots in this board and one ISA, free for use. Two of the PCI slots are used for a Diamond Supra 56K modem and a Creative SoundBlaster Live! Value sound card, which drives a matching set of PC Works speakers. While these aren't exactly hi-fi units, there are four satellites as well as the sub-bass unit, giving good reproduction of game effects.

Mesh fitted a Hercules 3D Prophet graphics adaptor with 32MB of DDR memory and runs a Diamond Pro 710 monitor with it. This is another of Mitsubishi's flat-face displays, which gives an excellent picture with sharp characters and, thanks to its Trinitron tube, none of the visible shadow-mask of some devices in the review.

The keyboard is one of Microsoft's Internet keyboards, which has a good key-feel, though key movement is a little restricted. It's accompanied by an Intellimouse, so together they give better than average manual input.

Performance was good, just a shadow below the Elonex and Evesham machines and a touch above the NEC Direction on the SYSmark benchmark. It produced almost identical 3DMark figures to the Evesham's 700MHz Athlon, not too surprising when you realise it has the same system board and memory, though Mesh's graphics card uses double data rate memory which should have given it the edge. Mesh includes the WordPerfect Office 2000 Suite with the Matrix 700P, which is a well designed integrated suite, more thorough than SmartSuite in some respects. Overall, this is a good machine, on which Mesh has included delivery – an added bonus.

PC Plus

VERDICT

MESH MATRIX 700P

System unit	9
Keyboard & mouse	8
Video system	10
Performance	9
Bundles & warranty	8
Value for money	8

8/10

■ PRICE £1,174 ■ EX VAT £999 ■ SUPPLIER nec ■ PHONE 0870 0106326 ■ WWW www.nec-online.co.uk

The direct sales arm of NEC has been producing stronger and stronger PCs since it started up over a year ago. This latest Direction Sm733VP system, based around a Pentium III, has an exciting performance.

Mounted in a slimline midi tower case, the drive complement isn't as exciting on the outside as some others. There's a 10-speed NEC DVD drive and a standard floppy, which looks a little impoverished in this company. The hard drive, though, is a Maxtor 28.6GB device, roughly 50 per cent higher capacity than most others here, offering plenty of room.

The 733MHz Pentium III is accompanied on the Microstar system board by 128MB of 133MHz SDRAM memory to accompany the 133MHz bus used on the Intel chip.

The system board has five PCI expansion slots and one ISA. Two of the PCI slots are occupied by a 56K US Robotics modem and an Aureal Vortex 2 sound card, which gives more authentic four channel sound than Creative's. It runs a set of Labtec speakers which provide comparatively good sound, with equally strong support for sound effects and music playback.

NEC uses a GeForce 256-based graphics adaptor, though this time one with 32MB of standard graphics memory. This runs a 17-inch monitor, again from NEC, which includes separate RGB inputs as well as the standard VGA socket, but it also has a small screen diagonal of 15.5-inches making it a bit small for a 17-inch monitor. The picture is generally clear and control is easy through a push button and finger-wheel.

Performance on the SYSmark benchmark was a touch below some of the others with their Athlon chips, though this would be hard to notice under normal use.

When it came to the 3DMark tests, though, results were higher than from any other machine in the group, with indexes of well over 7,000. This makes the Direction an excellent choice for games players looking for 3D power.

The software bundle is much better than normal, based around Works and Word, but adding in CorelDRAW and Encarta for good measure, giving you all you need to keep busy for some time. Overall, this is a worthwhile PC with a fine turn of speed.

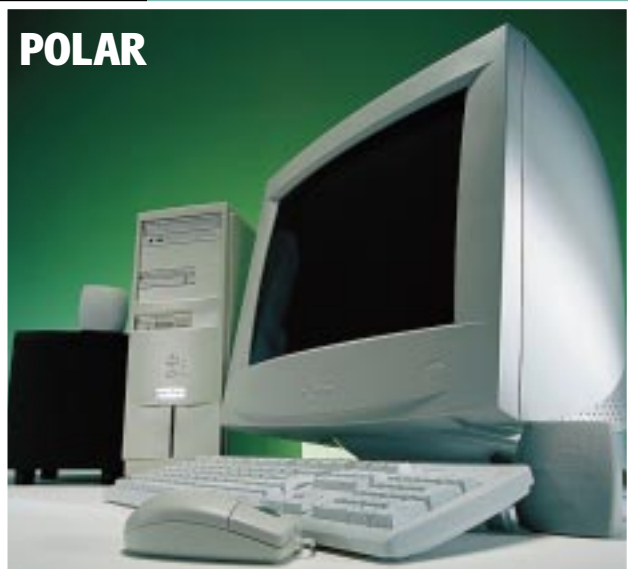
PC Plus

VERDICT

NEC DIRECTION SM733VP

System unit	8
Keyboard & mouse	7
Video system	9
Performance	9
Bundles & warranty	9
Value for money	8

8/10

**PC Plus****POLAR****PROFESSIONAL PIII 600**

Polar's well-configured machine is let down on performance by its comparatively slow processor

PRICE £1,200 ■ EX VAT £1,021 ■ SUPPLIER Polar ■ PHONE 0800 138 1238 ■ WWW www.polartechnology.com

Polar has built quite a reputation for supplying good value machines and building them well. This Professional PIII 600 midi tower, in its slimline case, continues this tradition. It has a 10-speed DVD in the top drive bay and a 100MB Zip drive as well as a 3.5-inch floppy further down.

Inside, the Super Micro system board has sockets for Rambus and SDRAM memory – two of each – and 128MB of standard 100MHz DIMMs are fitted to back up the Pentium III processor. This is a 600MHz device, one of the slowest in the group and would be appropriate in a much lower priced PC. We would expect to see at least a 700MHz or 750MHz chip in this price range. Not an auspicious start.

As partial compensation, Polar has included both a V90 modem and an Ethernet network card in its machine, so you have a deal of flexibility in linking this machine to others. There are no ISA expansion slots and just two free PCI ones which limits future expansion somewhat.

The graphics adaptor is a Matrox Millennium G400, which is a card we don't see that much of anymore. While it has reasonable 2D and 3D performance, it's not up to the GeForce 256 chips on several of the other PC's cards. It runs a 19-inch Hansol monitor which gives a good picture and is easy to adjust. A decent size monitor like this is refreshing at this price.

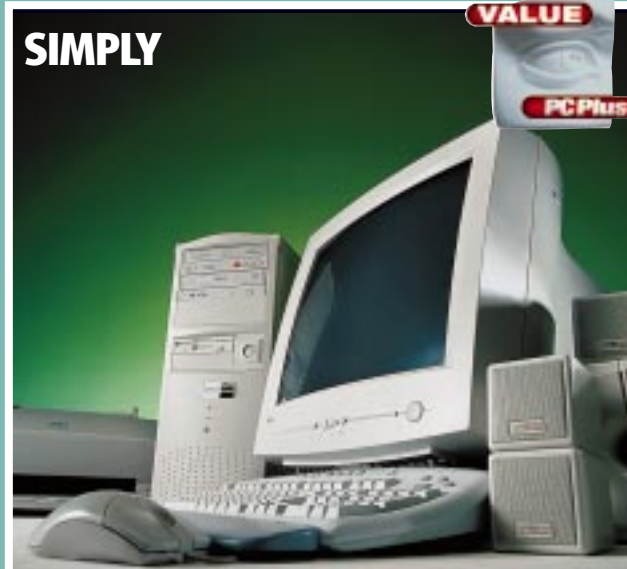
We had to nurse the Polar machine through the SYSmark benchmark, as it refused to close down Windows consistently, leaving the Windows Shutting Down screen showing instead.

The results we got from it were consistent with the processor and graphics adaptor fitted, but that's not to say they were very good. The *PC Plus* index was below 8, very low in this company and, although the 3DMark results were in the mid 4,000s (which is fair), overall the machine missed out.

If performance isn't the main reason for buying, though, the Polar Professional PIII 600 offers some useful extras, with a big screen, Zip drive and a networking adaptor as standard. There's a copy of SmartSuite Millennium bundled in and a three year warranty to top it off. All this doesn't quite compensate for the lack of performance, though.

PC Plus**VERDICT****POLAR PROFESSIONAL PIII 600**

System unit.....	8
Keyboard & mouse.....	7
Video system.....	7
Performance.....	6
Bundles & warranty.....	8
Value for money.....	8

7/10**SIMPLY****SYSTEMAX 700RV**

This may not have a performance edge, but is a very well specified system for the money

PRICE £1,198 ■ EX VAT £1,020 ■ SUPPLIER Simply ■ PHONE 0208 498 2100 ■ WWW www.simply.co.uk

The Systemax Athlon 700RV is a very interesting system from one of the biggest retail peripheral and component suppliers in the country. With access to such a wide range of parts, it's perhaps unsurprising that the machine should include some unusual choices.

As well as a Ricoh combo DVD and CD-RW drive, there's a straight CD drive from Creative, too. Well, straight is not quite the word, as it's rated at 52-speed and has an orange button on its front panel marked 'Turbo'. Press this and the drive spins up to a new top speed, making a sound like something which might abduct Fox Mulder. A standard floppy sits below these twin drives, with a 19GB Maxtor hard drive inside for permanent storage.

The machine is based around a 700MHz Athlon processor with 128MB of PC-100 memory. There's a V90 modem and a SoundBlaster Live! 1024 sound card plugged into two of the BioStart system board's PCI slots. The SoundBlaster runs a set of PC Works FPS1000 speakers which give good sound for games.

Graphics are provided by an ATI Rage Fury Maxx card, which uses two 3D Rage 128 processors to handle alternate video frames. It displays on a good 17-inch Iiyama S700JT1 monitor, similar to Carrera's, so the same comments apply.

Performance wasn't up to the Octan's nor several of the other machines in the group, either on the SYSmark or 3DMark benchmarks, but wasn't far enough behind to cause any problems in general use.

As well as the PC itself, Simply has bundled an Epson Stylus 460 printer, which we rate as highly as the Lexmark 3200 supplied by Tiny. Although the Stylus offers a lower resolution, photo print quality is on a par between the two. There's a SideWinder gamepad bundled, too.

This is handy, as Simply includes four strong games: Unreal Tournament, Driver, Roller-Coaster Tycoon and UEFA Champions League Soccer. It matches these up with a full copy of Works and a copy of Nero Burning ROM, an excellent CD-R utility. Unfortunately no CD-R or CD-RW media is included.

Overall, the Systemax is an excellent, high value bundle. A strong home and games machine.

PC Plus**VERDICT****SIMPLY SYSTEMAX ATHLON 700RV**

System unit.....	10
Keyboard & mouse.....	9
Video system.....	8
Performance.....	7
Bundles & warranty.....	8
Value for money.....	10

9/10



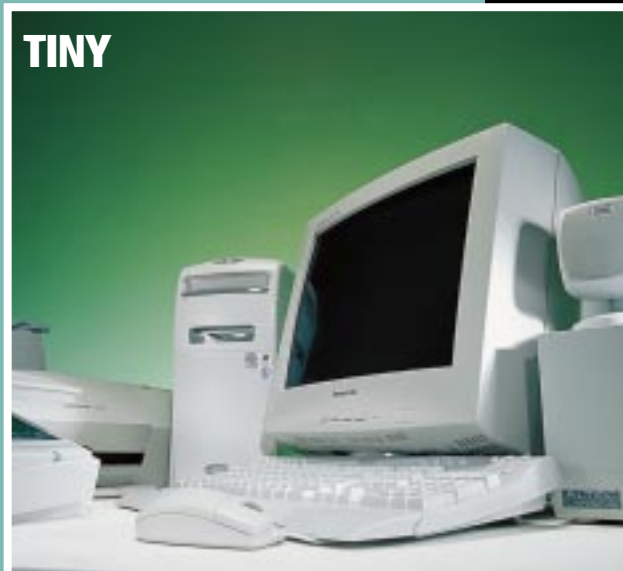
SPECIAL RESERVE



MAXX 4D 800

Special Reserve's MAXX 4D 800 is a bit under-specified in this company

TINY



HOME PERFORMANCE PLUS

Tiny provides a lot of extras with this system

PRICE £1,200 ■ EX VAT £1,021 ■ SUPPLIER Special Reserve ■ PHONE 01279 321321 ■ WWW www.ukgames.com

Special Reserve packages its systems well and the MAXX 4D 800 is no exception, though when you get through to the content you wonder a bit where the money went. The wide midi-tower case includes a Pioneer DVD drive and a standard floppy, but no attempt to include a CD-RW. Over half the machines in the group included either combo drives or twin DVD and CD-RW pairs. The 19GB Fujitsu hard drive is no better than average for this group, either.

The 800MHz Pentium III processor should give the machine a good kick, particularly if you look at what NEC did with its 733MHz socket 370 chip. As with all the others, Special Reserve's PIII works with 128MB of memory.

A 56K modem sits in one of four PCI slots on the Chaintech system board, with a Creative SoundBlaster Live! Value sound card taking up another. This runs a PC Works FPS1000 speaker set, which gives fair but not outstanding sound.

The graphics adaptor is a Creative 3D Blaster Annihilator, based on nVIDIA's GeForce 256 chip with 32MB of memory. It runs a 17-inch Viewsonic E70 monitor which handles the signal well, giving a tight, sharp picture and easy control through a well-designed on-screen display.

The Taiwanese keyboard and mouse are both reasonable, though the key feel could be better on the keyboard. It does include extra keys to control the PC's suspend mode, though this wasn't set up by default.

Performance wasn't a strong point of the MAXX 4D, with only the Avanti, Polar and Tiny machines slower on the SYSmark benchmark – they all have lower clock-rate processors. Compared with the Elonex, the other machine with an 800MHz Pentium III on-board, the Special Reserve was around 15 per cent slower. 3D performance was better, propped up by the GeForce chip on the graphics card, but even this couldn't produce a 3DMark index much above 5,000.

Special Reserve bundled SmartSuite and a couple of unusual games, X-Files and Baldur's Gate with the MAXX 4D and offers a year's on-site warranty. Overall, though, this machine is nothing really special.

PC Plus

VERDICT

SPECIAL RESERVE MAXX 4D 800

System unit.....	7
Keyboard & mouse.....	7
Video system.....	8
Performance.....	6
Bundles & warranty.....	7
Value for money.....	6

7/10

PRICE £1,174 ■ EX VAT £999 ■ SUPPLIER Tiny ■ PHONE 0800 783 9812 ■ WWW www.tiny.com

As usual, Tiny likes to throw in everything it can to provide a complete system, where others can justify only the PC itself. Here we have a Pentium III PC in a mini tower case, which makes expansion a bit more awkward than in the other systems, as well as a monitor, printer, scanner, gamepad and a stack of software. So what does it all amount to?

The PC includes a 10-speed DVD drive, a floppy and a 19GB hard drive – a mixture you may recognise from several other systems in this group. There's a SoundBlaster 128 chip on the Microstar MicroATX system board, which runs a better than average trio of Altec Lansing speakers and a 56K modem, too.

The graphics sub-system comprises an nVIDIA Riva TNT 2 chip running a neat 17-inch Panasonic SL75 monitor, which has a shortened tube, giving a very compact footprint. Keyboard and mouse are good, with the multimedia keyboard offering a lot of extra functions and a reasonable key feel.

Performance is where the Tiny struggles. Although its 650MHz Pentium III processor isn't the lowest rated in the group, its PC Plus index is. It managed only 7.76, lower even than Polar's 600MHz Pentium III. 3DMark results weren't good either, thanks to last year's Riva TNT 2 chip, not considered cutting-edge these days.

What you have to balance against this are the copious extras Tiny provides. There's a 1,200dpi Lexmark 3200 ink-jet printer, which is a good, mid-range device, and a 300dpi Primax Colorado scanner, rebadged as a Tiny device. Although the optical resolution of the scanner is low, it should be suitable for scanning for screen display and Web use. Buying a printer and scanner separately, you wouldn't have much change out of £200 so this bundle is something of a bargain.

Tiny provides Works Suite 2000 as the core software in this machine, but adds in a bundle of another 32 reference, multimedia and games titles. This should give something for everyone and is among the best bundles you'll see.

Overall, though, there are questions over the system's performance and expandability. It depends what you want – if you want the system as supplied and won't be stressing it too far, then the Home Performance Plus could be a good buy.

PC Plus

VERDICT

TINY HOME PERFORMANCE PLUS

System unit.....	6
Keyboard & mouse.....	8
Video system.....	7
Performance.....	6
Bundles & warranty.....	9
Value for money.....	9

8/10

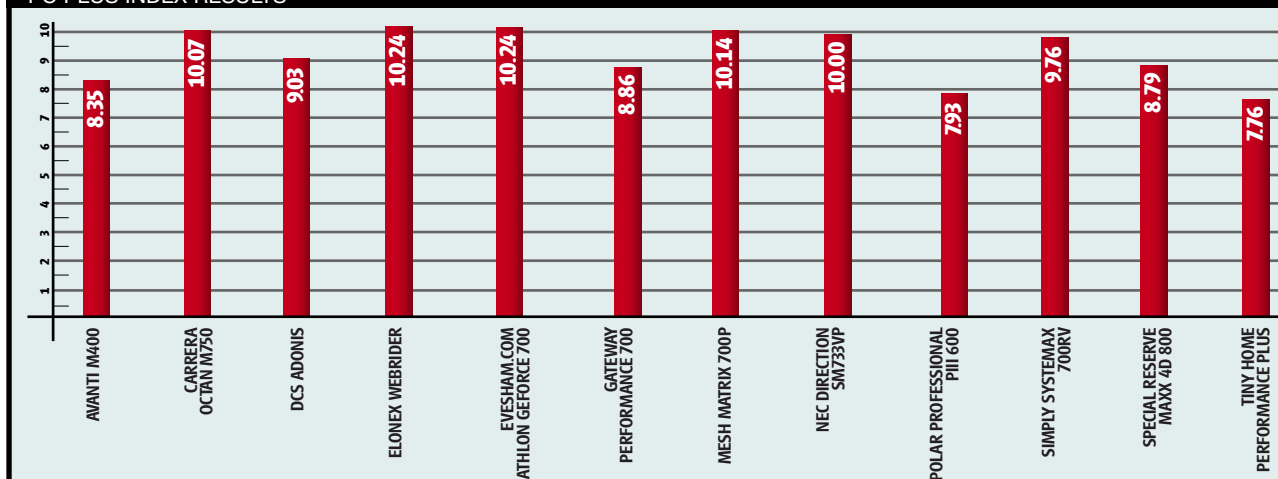


PC PLUS PRODUCT FACTS

	m400	Octan M750	Adonis
Supplier	Avanti	Carrera	DCS
Supplier type	Direct	Direct	Direct
Telephone number	08707 551000	0208 307 2805	0121 414 7555
Price	£1,174 (£999 ex VAT)	£1,199 (£1,020 ex VAT)	£1,174 (£999 ex VAT)
Warranty	1 yr on-site + 4 years b-to-b, labour only	2 years on-site	1 year back-to-base + 4 years labour only
Delivery charge	£29	£35	£35
Credit card surcharge	None	None	2%
Proc. type – Speed (MHz)	Pentium III – 750	Athlon – 750	Athlon – 650
Chipset – Bus speed (MHz)	VIA – 100	AMD 751/6 – 100	VIA – 133
Supplied memory (MB)	128	128	128
Maximum memory (MB)	384	768	1.5GB
Secondary cache (K)	256	512	512
Hard drive capacity (GB)	18.9	19.0	16.9
Hard drive make	Samsung	Fujitsu	Samsung
CD-ROM make – speed	Panasonic DVD – 10x	Panasonic DVD – 10x	Ricoh DVD/CD-RW – 4/24x
Other drives and devices	Floppy, HSP V90 modem	Panasonic CD-RW, floppy, HSP V90 modem, Hauppauge TV card	Floppy, Conexant V90 modem
ISA Expansion slots – free	2 – 2	2 – 2	0
PCI Exp slots – free, AGP	4 – 2, 1	5 – 2, 1	5 – 3, 1
Monitor	Smile CA6746SL	Iiyama S700JT1	Belinea 10 30 40
quoted diagonal (in)	17	17	17
measured diagonal (in)	16.00	15.75	15.50
dot pitch (mm)	0.28	0.28	0.26
Video adapter	nV GeForce 256	Maxi Gamer TNT2	Creative Annil DDR
video memory (MB)	32	32	32
Serial ports	2 x 9, 2 x USB	2 x 9, 2 x USB	2 x 9, 4 x USB
Parallel	1	1	1
Make of mouse	DigiAge	Microsoft	Logitech iTouch
Operating system	Windows 98 SE	Windows 98 SE	Windows 98 SE
Bundled software	DVD/modem/sound utils	SmartSuite Mill, Carrera Deluxe Ent Pack (8 titles), DVD/CD-RW/ modem/sound utils	DVD/CD-RW/modem/sound utils
Sound card	Creative SB Live! V	Creative SB Live! V	Creative SB Live! V
Speakers	Creative PC Works	Altec Lansing ACS54	Logitech SoundMan G1
BIOS make	Award	Award	Award
Power – Suspend (W)	284 – 308	194 – 72	194 – 74
Faults as supplied	None	None	3DMark games jerky
	6/10	7/10	7/10

PC Plus Test Results

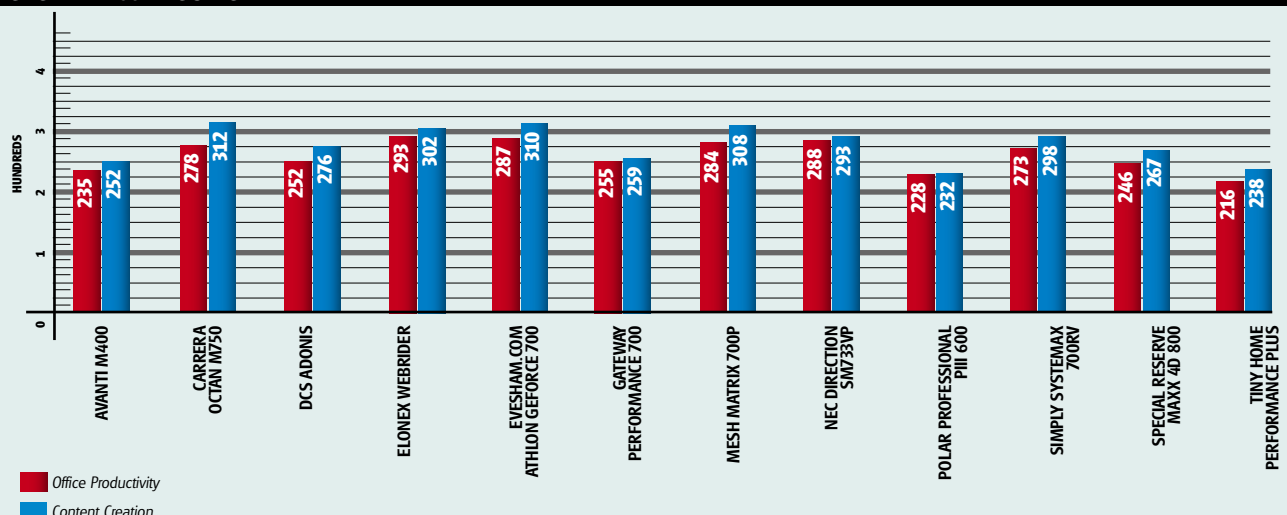
PC PLUS INDEX RESULTS





WebRider	Athlon GeForce 700	Performance 700	Supplier
Elonex	Evesham.com	Gateway	Supplier
Direct	Direct	Direct	Supplier type
08000 374465	0800 038 0800	0800 14 2000	Telephone number
£1,251 (£1,065 ex VAT)	£1,199 (£1,020 ex VAT)	£1,103 (£939 ex VAT)	Price
1 year on-site	2 years on-site	1 year on-site + 1 year back to base	Warranty
£18	£34	£42	Delivery charge
None	None	None	Credit card surcharge
Pentium III – 800	Athlon – 700	Pentium IIIE – 700	Proc. type – Speed (MHz)
VIA – 133	AMD – 100	Intel BX -100	Chipset – Bus speed (MHz)
128	128	128	Supplied memory (MB)
1GB	768	768	Maximum memory (MB)
256	512	256	Secondary cache (K)
190	190	191	Hard drive capacity (GB)
Fujitsu	Maxtor	Western Digital	Hard drive make
Acer DVD – 10x	Samsung DVD/CD-RW – 4/24x Floppy,	Toshiba DVD – 10x	CD-ROM make – speed
Zip 100, Floppy, US Robotics 56K modem	Diamond Supra Express 56K modem	Floppy, 56K modem	Other drives and devices
2 – 2	1 – 1	1 – 1	ISA Expansion slots – free
5 – 4, 1	6 – 4, 1	5 – 3, 1	PCI Exp slots – free, AGP
Elonex V999	Taxan VVision T710	Gateway EV700	Monitor
19	17	17	quoted diagonal (in)
18.00	16.00	16.00	measured diagonal (in)
0.26	0.27	0.28	dot pitch (mm)
All-in-Wonder 128	Chaintech RI70	3dfx Voodoo3 3000	Video adapter
32	32	16	video memory (MB)
2 x 9, 2 x USB	2 x 9, 2 x USB	2 x 9, 2 x USB	Serial ports
1	1	1	Parallel
MS Intellimouse	Logitech Pilot Plus	MS Intellimouse	Make of mouse
Windows 98 SE	Windows 98 SE	Windows 98 SE	Operating system
SmartSuite Millennium, DVD/Zip/ modem/sound utils	SmartSuite Mill, Penguin Comp, GSP Comp, 3 games, modem/sound utils DVD/CD-RW/modem/sound utils	MS Works Suite 2000, ViaVoice, DVD/modem/ sound utils	Bundled software
Creative SB128	Creative SB128	Creative SB128	Sound card
Creative PC Works	Cambridge SBS52	Cambridge SBS52	Speakers
Award	AMI	Phoenix	BIOS make
144 – 53	209 – 86	146 – 50	Power – Suspend (W)
None	None	None	Faults as supplied
8/10	9/10	7/10	

SYSMARK 98 RESULTS

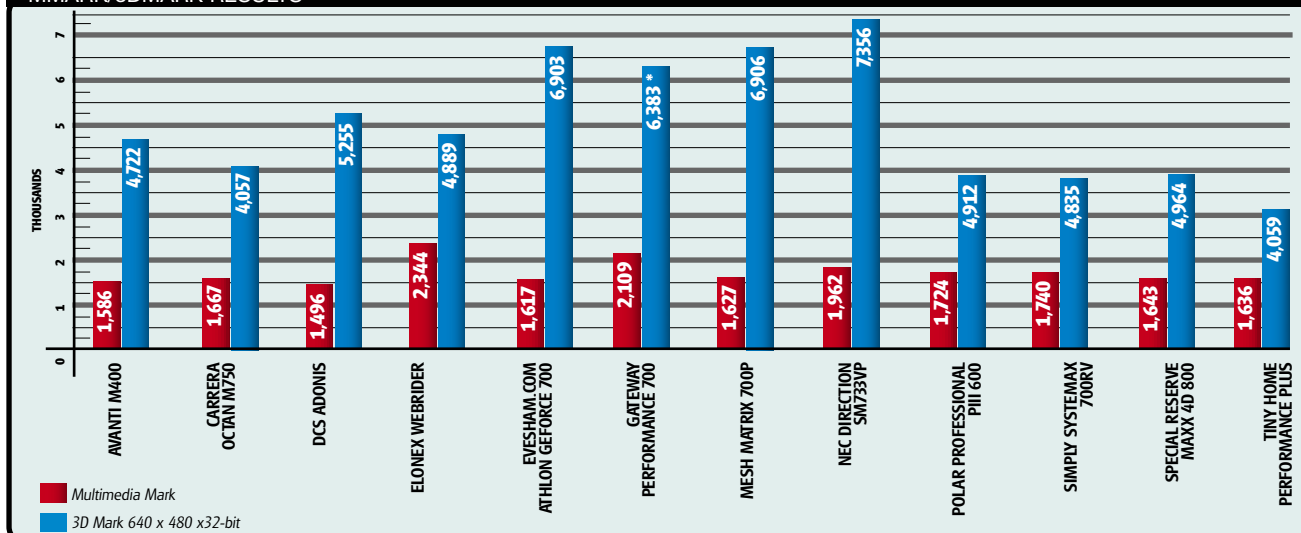




PC PLUS PRODUCT FACTS

	Matrix 700P	Direction Sm733VP	Professional PIII 600
Supplier	Mesh	NEC Direct	Polar
Supplier type	Direct	Direct	Direct
Telephone number	0181 208 4744	0870 333 6329	0800 138 1238
Price	£1,198 (£1,020 ex VAT)	£1,174 (£999 ex VAT)	£1,174 (£999 ex VAT)
Warranty	1 year on-site + 2 years back to base	1 year on-site	1 year back to base + 2 years labour only
Delivery charge	Included	£35	£29
Credit card surcharge	None	None	3%
Proc. type – Speed (MHz)	Athlon – 700	Pentium III – 733	Pentium III – 600
Chipset – Bus speed (MHz)	AMD – 100	VIA – 133	Intel 820 – 100
Supplied memory (MB)	128	128	128
Maximum memory (MB)	768	768	1GB
Secondary cache (K)	512	256	256
Hard drive capacity (GB)	19.1	28.6	23.8
Hard drive make	IBM	Maxtor	IBM
CD-ROM make – speed	Pioneer DVD – 10x	NEC DVD – 10x	Panasonic DVD – 10x
Other drives and devices	TEAC CD-RW, floppy, Diamond Supra 56K modem	Floppy, US Robotics 56K modem	Zip 100, floppy, Diamond Supra V90 modem, Ethernet
ISA Expansion slots – free	1 – 1	0	0
PCI Exp slots – free, AGP	6 – 4, 1	5 – 3, 1	5 – 2, 1
Monitor	Diamond Pro 710	NEC HR17	Hansol 996
quoted diagonal (in)	17	17	19
measured diagonal (in)	16.00	15.50	17.75
dot pitch (mm)	0.25	0.26	0.26
Video adapter	Hercules 3D Prophet	Leadtek Winfast 256	Matrox Mill G400
video memory (MB)	32	32	32
Serial ports	2 x 9, 2 x USB	2 x 9, 2 x USB	2 x 9, 2 x USB
Parallel	1	1	1
Make of mouse	MS Intellimouse	Logitech Pilot Plus	MS Intellimouse
Operating system	Windows 98 SE	Windows 98 SE	Windows 98 SE
Bundled software	WordPerfect Office 2000, DVD/CD-RW/modem/sound utils	Word 2K, Works 2K, CorelDRAW 7, Encarta 99, AND Route Europe 99, ViaVoice 2K, Norton AV 2K, Money 2K, DVD/modem/sound utils	SmartSuite Mill, DVD/modem/sound utils
Sound card	Creative SB Live! V	Aureal Vortex 2	Creative SB Live! V
Speakers	Creative PC Works	Labtec LCS2514	Labtec LCS2414
BIOS make	AMI	AMI	AMI
Power – Suspend (W)	284 – 308	206 – 103	149 – 60
Faults as supplied	Both CD drives set as master	None	Wouldn't shut down Windows consistently
	8/10	8/10	7/10

MMARK/3DMARK RESULTS



**PC Plus****Systemax Athlon 700RV**

Simply
Direct
08707 297644
£1,198 (£1,020 ex VAT)
1 year back to base + 2 years labour only
£29
None
Athlon – 700
AMD 751/6 – 100
128
768
512
15.3
Maxtor
Ricoh DVD/CD-RW – 4/24x
Creative 52x CD, floppy, Conexant 56K modem
2 – 2
5 – 3, 1
Iiyama S700JT1
17
15.75
0.28
ATI Rage F Maxx
2 x 32
2 x 9, 2 x USB
1
Logitech Pilot Plus
Windows 98 SE
Works, Unreal Tournament, Driver, RC Tycoon, UEFA Soccer, Nero, DVD/ CD-RW/modem/ sound utils
Creative SB Live! V
Creative FPS 1000
Award
199 – 72
None
9/10

MAXX 4D 800

Special Reserve
Direct
01279 321321
£1,200 (£1,021 ex VAT)
1 year on-site
£25
None
Pentium III – 800
VIA – 100
128
384
256
190
Fujitsu
Pioneer DVD – 10x
Floppy, Conexant 56K modem
2 – 2
4 – 2, 1
Viewsonic E70
17
16.00
0.27
3D Blaster Annihil
32
2 x 9, 2 x USB
1
Genius NetScroll +
Windows 98 SE
SmartSuite Mill, X-Files, Baldur's Gate, DVD/modem/sound utils
Creative SB Live! V
Creative FPS 1000
Award
206 – 84
None
7/10

Home Performance Plus

Tiny	Supplier
Direct	Supplier type
0800 731 7283	Telephone number
£1,174 (£999 ex VAT)	Price
1 year collect and return	Warranty
Included	Delivery charge
None	Credit card surcharge
Pentium III – 650	Proc. type – Speed (MHz)
VIA – 100	Chipset – Bus speed (MHz)
128	Supplied memory (MB)
256	Maximum memory (MB)
256	Secondary cache (K)
190	Hard drive capacity (GB)
Western Digital	Hard drive make
Panasonic DVD – 10x	CD-ROM make – speed
Floppy, HSP 56K modem	Other drives and devices
1 – 1	ISA Expansion slots – free
3 – 2, 1	PCI Exp slots – free, AGP
Panasonic SL75	Monitor
17	quoted diagonal (in)
16.00	measured diagonal (in)
0.27	dot pitch (mm)
nVidia Riva TNT2	Video adapter
32	video memory (MB)
2 x 9, 2 x USB	Serial ports
1	Parallel
MS Intellimouse	Make of mouse
Windows 98 SE	Operating system
Works Suite 2000, 32 CD pack, DVD/modem/sound utils	Bundled software
Creative SB 128	Sound card
Altec Lansing ACS33	Speakers
Award	BIOS make
216 – 238	Power – Suspend (W)
None	Faults as supplied
8/10	

OTHER PERFORMANCE FIGURES**AVANTI M400**

MM Video Playback.....	558
MM Image Processing.....	2,308
3DMark 1,024 x 768 x 16-bit....	4,671
CDTach.....	20.9x

CARRERA OCTAN M750

MM Video Playback.....	631
MM Image Processing.....	2,169
3DMark 1,024 x 768 x 16-bit....	3,865
CDTach.....	17.0x

DCS ADONIS

MM Video Playback.....	633
MM Image Processing.....	1,931
3DMark 1,024 x 768 x 16-bit....	5,240
CDTach.....	2.8x

ELONEX WEBRIDER

MM Video Playback.....	1,667
MM Image Processing.....	2,902
3DMark 1,024 x 768 x 16-bit....	3,521
CDTach.....	15.5x

EVESHAM.COM ATHLON GEFORCE

MM Video Playback.....	632
MM Image Processing.....	2,118
3DMark 1,024 x 768 x 16-bit....	6,563
CDTach.....	15.8x

GATEWAY PERFORMANCE

MM Video Playback.....	1,607
MM Image Processing.....	2,502
3DMark 1,024 x 768 x 16-bit....	5,138
CDTach.....	25.7x

MESH MATRIX 700P

MM Video Playback.....	632
MM Image Processing.....	2,134
3DMark 1,024 x 768 x 16-bit....	6,453
CDTach.....	7.3x

NEC DIRECTION SM733VP

MM Video Playback.....	633
MM Image Processing.....	2,701
3DMark 1,024 x 768 x 16-bit....	7,224
CDTach.....	6.6x

POLAR PROFESSIONAL

MM Video Playback.....	1,292
MM Image Processing.....	2,134
3DMark 1,024 x 768 x 16-bit....	4,262
CDTach.....	21.8x

SIMPLY SYSTEMAX

MM Video Playback.....	1,962
MM Image Processing.....	2,014
3DMark 1,024 x 768 x 16-bit....	4,558
CDTach.....	21.2x

SPECIAL RESERVE MAXX

MM Video Playback.....	558
MM Image Processing.....	2,292
3DMark 1,024 x 768 x 16-bit....	5,082
CDTach.....	16.1x

TINY HOME PERFORMANCE

MM Video Playback.....	1,135
MM Image Processing.....	2,120
3DMark 1,024 x 768 x 16-bit....	3,908
CDTach.....	21.4x





PC Plus Verdict

£999 (ex VAT) is a price where it really is worth shopping around to get the best deal. There's a wide range of specifications available

SIMON SAYS

Trends, what trends?

Pity the poor reviewer, who has to try and make some sense of this set of figures

In reviewing a group of new PCs, you might expect to see some trends. You might, quite reasonably, expect to see a trend towards improved results with higher clock speeds.

In fact, though, there are so many discrepancies in the *PC Plus* indexes, that it's hard to draw significant conclusions of this sort. The Athlon 750 gives a lower index than two of the 700s and the 370-pin Pentium 733 in the NEC Direction outperforms processors one and two clock rates higher. The two Pentium III 800s show a dramatic performance difference and with the exception of the PIII 733, you can see how the Athlons outperform Pentium IIIs at each clock rate.

Where you do see some adherence to logic is in the graphics card trends. The cards that are generally regarded as having stronger 3D performance do give better times on the 3D benchmarks. The GeForce chip, in particular, shows consistently higher results than the other possible (and usually cheaper) choices. Even here, though, the 733MHz Pentium III boosts its 3D result higher than any other combination of processor and graphics chip.



	PC Plus Index	nVidia Riva TNT 2	Matrox C400	ATI 3D Rage 128	3dfx Voodoo3	nVidia GeForce 256
Athlon 650	9.03					5,240
Athlon 700 (3 of)	10.24 10.14 9.76			10.24 4,555 (Maxx)		6,563 6,453
Athlon 750	10.07	3,865				
Pentium 600	7.93		4,262			
Pentium 650	7.76	3,908				
Pentium 700	8.86				5138	
Pentium 733	10.00					7,224
Pentium 750	8.35					4,671
Pentium 800 (2 of)	8.79 10.24			2,921		5,082

BEST BUY – VALUE

SIMPLY SYSTEMAX ATHLON 700RV

PRICE £1,198 EX VAT £1,020 SUPPLIER Simply Computers PHONE 08707 297644 WWW www.simply.co.uk

The Systemax Athlon 700RV is tremendous value, but doesn't sacrifice quality to include all the extras. In fact, it's innovative in its combination of components. It starts by using a combined DVD and CD-RW drive, which several other machines in the group do, but adds in a fast CD drive, too, so you have good back-up facilities.

The graphics card uses twin graphics chips to maintain strong 3D performance and the Iiyama monitor gives an excellent display. The system includes a worthwhile Epson ink-jet printer, a Microsoft SideWinder gamepad and four good games as part of its software bundle. The five speaker PC Works set may not give the best sound in the world, but does incorporate Environmental Audio. The performance is above average on the SYSmark benchmark and fair on the 3DMark test. This is a machine with which you can do a lot without breaking the bank.



The Simply Systemax is an excellent machine that comes with an Epson printer and a variety of software.



BEST BUY – PERFORMANCE

EVESHAM ATHLON GEFORCE 700

PRICE £1,199 EX VAT £1,020 SUPPLIER Evesham.com PHONE 0800 038 0800 WWW www.evesham.com

Evesham.com has always been good at squeezing extra performance from the same hardware as other suppliers. This is exactly what the company has done here. Using a 700MHz Athlon as the main processor, with PC100 memory, not the slightly faster and lots more expensive 133 variety, it managed the joint highest *PC Plus* index of any of the 12 machines in the group. It ran up an index of over 10, which few machines with clock rates of under 800MHz have managed.

So why did we give the award to the Evesham.com machine and not the Elonex, which shared the top SYSmark result? Evesham has used a GeForce 256-based graphics card which gives it the second fastest 3D results from 3DMark, too. With this high level of performance in both serious and games software, the machine deserves recognition.



The Evesham machine combines quality components to create a powerful system.



OTHER NOTABLES

There are several other machines in the group that deserve a mention for performance, specification or both. The NEC Direction Sm733VP did very well with its socket 370 Pentium III processor, scoring a straight 10 on the *PC Plus* index and two indexes of well over 7,000 in the low and high resolution 3DMark benchmark. Both Carrera and Mesh hit good balances between fast hardware and well balanced systems and Elonex, with its 19-inch monitor, also did well.

The Polar would have been in this group too, if it hadn't been for its slow 600MHz processor. Tiny did its usual of including a printer, scanner, gamepad and stack of software, but this time didn't pull off an award. The machine suffered on performance and from a lack of expandability. It's still a package to short-list if your requirements are for something you can use straight out of the box for a lot of home-based tasks.

So, honourable mentions for five out of the 12 machines in the group, illustrating the high standard we saw overall. Shame they can't all be winners.