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Xmas XP systems

Now Windows XP is with us we decided to see what sort of PC you can buy for £999 with the new operating system bundled

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Windows XP has now been launched. It will soon be Microsoft's *de facto* operating system and will ship with most PCs. So, this month we undertake our first XP-dedicated group test, to see how the UK's top PC manufacturers have implemented what is being seen as the last hope for an early revival of the computer industry.

The prices of memory and processors continue to fall as the months go by, so we felt we could be quite generous with our spec. The processor was set to run at a minimum of 1GHz, and we wanted to see at least 256MB under the hood. In many cases both requirements were far exceeded, as was the 30GB hard drive stipulation. We wanted a 17in monitor connected to a graphics card with at least 32MB of memory but left the rest of the components pretty much up to each manufacturer, as long as the staple modem, speakers, sound card and CD or DVD drives were included.

As this is the Christmas issue of *PCW*, we were hoping to have fun with these machines. Printers, scanners and great software bundles weren't strictly required, but they do always add to the value of a system.

In all, we received 10 machines, so if you want a PC with XP ready and working, read on. >

Aries/Watford XP1400

PRICE £1,173.83 (£999 ex VAT) **CONTACT** Aries/Watford 0870 220 0700

PROS Memory; latest Creative sound card and speakers **CONS** 3D performance

OVERALL With the right drivers this system should perform much better

FEATURES ■■■■■ **PERFORMANCE** ■■■■■
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Windows XP takes advantage of USB to a much greater extent than any other OS, so we were not surprised that Aries submitted a case with front-mounted USB ports. Unfortunately they weren't attached to the motherboard, so of little use without a bit of tweaking. Ports aside, the Aries doesn't have the features to compete with others here. It's built around the 1.4GHz Athlon, rather than the new Athlon XP and carries a respectable 512MB of PC2100 SDRAM.

MSI's K7T266 motherboard is reasonable, but not the fastest on the market. It has an extra USB bracket at the back, which houses the onboard USB networking port. Graphics are handled by a Leadtek GeForce3 with 64MB of DDR memory and both DVI and S-Video out. Watford didn't install the latest drivers, though, so it did not perform at its best.

This is one of the first systems we have seen to ship with Creative's new Audigy sound card (reviewed last

month) and Inspire 5300 speakers. These replace the DTT 2200 as Creative's mainstream 5.1 offering, and the general consensus in the PCW office is that they are a cut above their predecessors.

The Audigy card comes with an SB1394 connector – that's FireWire in non-Creative speak. The last add-in card is a standard 56K PCI modem. Taking care of storage is the 40GB Seagate Barracuda hard drive, but it appears fairly poky compared to others here. At the front are two drives from Liteon, a CD writer that writes at 24-speed and rewrites at 10-speed, plus a 16-speed DVD-ROM drive.

We've never been too keen on AOC monitors, but the unit that ships with this Aries is not too bad at all and features a flat display capable of a 75Hz refresh at resolutions of up to 1,600 x 1,200. It's a shame that this system didn't live up to our expectations. It's well specified, but one of the slowest PCs on test.



Evesham Axis 1700+

PRICE £1,173.83 (£999 ex VAT) **CONTACT** Evesham 0870 160 9500

PROS Very fast; good monitor **CONS** No extra goodies for Christmas

OVERALL Very impressive system performance; a bit short on extras, though

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Evesham has gone for a fairly high-spec machine this month, without putting the most powerful processor inside. It has opted, instead, for an Athlon XP 1700+ (1.47GHz), which performs admirably.

To complement the processor is 512MB of PC2100 DDR SDRAM and an Asus A7V266 motherboard. Despite the fact that other systems in this test boast Asus boards with the same model number, the revision in this PC is more up to date. The Leadtek GeForce3 graphics card has 64MB of DDR memory and both DVI and S-Video outputs. Evesham has managed to squeeze every last drop of performance out of the card, and the result is this month's fastest 3D test scores.

In common with many of this group's systems, the Axis features the new Creative Audigy sound card, complete with FireWire port, labelled SB1394. Apart from a few general tweaks to improve the overall music and game sound quality, this card

differs little from the Live! 5.1 card range. This is accompanied by a set of Cambridge Soundworks DTT 2200 speakers, but we'd have preferred the Inspire 5300s that were submitted by Aries/Watford. The only other expansion card you'll find is a standard 56K PCI modem.

Storage is taken care of by a 60GB Maxtor hard drive, which, although far from the biggest this month, is a reasonable choice.

Removable storage comes in the form of two Samsung drives, a 16-speed write, 10-speed rewrite CD-RW, and a 16-speed DVD-ROM drive. The monitor is a 17in LG Flatron 795FT Plus, one of the best we've come across. It's capable of resolutions of up to 1,600 x 1,200 at a flicker-free refresh of 75Hz. If you're after performance you can't go wrong with the Evesham. It is the fastest system in our 3D benchmarks this month and the second fastest running under SYSmark 2001.

Ideal AMD Expert G

PRICE £1,173.83 (£999 ex VAT) **CONTACT** Ideal Computing 0870 745 5061

PROS EIDE RAID; good for home video editing **CONS** Doesn't perform as well as others

OVERALL Not quite up there with the rest this month – there are better buys

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Ideal Computing is still relatively new to PCW group tests. So far it has performed fairly well, but has yet to win an award. Sadly this machine will do nothing to change that.

This time around Ideal has gone a slightly different route to some of the others here. To a certain degree this is a good thing but there are also downsides. The system is based on a 1.4GHz Athlon processor and this was the fastest Athlon around – last month. Now, it can't compete with the faster Athlon XP.

The processor and 256MB of PC2100 DDR SDRAM, slot into a Gigabyte GA-7ZXR motherboard, which has three memory slots and a Promise EIDE RAID controller. Connected to the latter are two 30GB Quantum Fireball hard drives in a RAID 0 configuration. Further storage is provided by a Samsung CD-RW drive, which writes CDs at 12-speed and CD-RWs at eight-speed. There's also a 12-speed Shuttle DVD-ROM drive.

Ideal seems to have geared this system toward the home video enthusiast as it comes with a 64MB Radeon DDR Vivo graphics card, as well as a FireWire card, which makes this system a good base for some basic home video editing. Sound is provided by a Creative SoundBlaster Live! 5.1 and a set of Cambridge Soundworks DTT 2200 speakers. Finally there is also a standard 56K PCI modem.

The monitor is another LG Flatron, but it is the lower-specified 775FT, which falls a little short of the 795FT Plus supplied by many of Ideal's competitors this month. This limits the system's maximum flicker-free resolution to 1,152 x 864, which is a shame considering its potential for video editing.

Overall, this is not a bad set of components, but when compared to the competition it's a bit short on performance, languishing towards the bottom of our benchmarks.



Mesh Matrix XP 1800XL

PRICE £1,173.83 (£999 ex VAT) **CONTACT** Mesh 020 8208 4706

PROS Very fast in SYSmark 2001; 19in monitor **CONS** Not so good at 3D; no extras

OVERALL A very capable system, and one of only two to come with a 19in monitor

FEATURES ■■■■■ **PERFORMANCE** ■■■■■
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Last month, the fastest Athlon processor was the 1.4GHz version based on the now old-hat Thunderbird core. This month, it's the Athlon XP 1800+, running at 1.53GHz and based on the Palamino core. Mesh has taken full advantage of this latest processor from AMD and bundled it with 512MB of PC2100 DDR SDRAM, which fills two of the three slots on the Asus A7V266 motherboard. This alone makes it one of the best specified systems here as far as processor speed and memory is concerned, but the system still has a few small yet significant shortcomings.

The first thing to diminish the impressiveness of this system is the inclusion of a GeForce2 Ti graphics card with 64MB of DDR SDRAM, as many of its competitors feature the GeForce3. We were, on the other hand, impressed to find the new Creative SoundBlaster Audigy card in the system, albeit an OEM version. This features both 5.1-channel output

and a single FireWire port. Bundled with this is a set of Cambridge Soundworks DTT 2200 speakers, which, while not the speakers that Creative has specifically designed for this sound card, are still a respectable choice. A 56K PCI modem rounds off the add-on cards.

The 60GB Western Digital hard drive should be ample for all but the most dedicated home video editors, and there's a 16-speed Teac CD-RW drive for backing up valuable data. You will also find a 16-speed Pioneer DVD drive to the front. The monitor is a brilliant Mitsubishi Diamond Plus 92 which, although a budget model, produces an excellent picture. This 19in unit is capable of flicker-free resolutions of up to 1,600 x 1,200 at 75Hz, but looks far better running at 1,280 x 1,024.

This is one of the fastest systems we've seen running SYSmark 2001 to date, cruising home with a very impressive score of 179. It's a shame the 3D results don't quite live up to this.

Multivision Vision Ultima XP Pro

PRICE £1,173.83 (£999 ex VAT) **CONTACT** Multivision 0870 066 0885

PROS Very fast; 19in monitor; big hard drive **CONS** 3D performance; 256MB of memory

OVERALL A very well-specified system that comes with everything you'd want and more

FEATURES ■■■■■ **PERFORMANCE** ■■■■■

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Multivision has done a good job this month, but its system doesn't quite reach the top spot. It is based on the fastest of the new Athlon XP chips, the 1800+ (which for those not yet *au fait* with AMD's naming system, runs at 1.53GHz) and this shows in the benchmarks: this is one of the fastest machines on test this month.

Multivision has gone down the budget route, and supplied only 256MB of PC2100 DDR SDRAM. This is half of that present in the machines from some of its competitors. To be fair, this seems to have little impact on performance, but as memory prices are currently at rock bottom, we'd like to have seen 512MB.

The motherboard is yet another MSI K7T266, but Multivision didn't supply the USB networking option with this PC. Graphics are handled by a GeForce2 Ti with 64MB of DDR memory, which produces reasonable 3D performance. It can't quite keep up with the GeForce3 cards, though.

Sound is provided by a VideoLogic Sonic Fury six-channel sound card and a set of Cambridge Soundworks DTT 2200 speakers. The system includes both a FireWire card and a standard 56K PCI modem. If you need a massive hard drive look no further, as Multivision has gone the extra mile and supplied Western Digital's latest 100GB hard drive, which is currently one of the largest on the market.

A Pioneer 16-speed DVD and a 24-speed write, 10-speed rewrite Mirai CD-RW sit in two of the four 5.25in drive bays at the front. The 19in Hansol 920D monitor is a cut above the competition and capable of flicker-free resolutions of up to 1,600 x 1,200 at 75Hz.

As a Christmas bonus Multivision has supplied both a Logitech web camera and a Thrustmaster Force Feedback gamepad. Overall this is an excellent bundle with great performance. The only area where it's slightly lacking is 3D power.



Panrix Magnum 1600XK

PRICE £1,173.83 (£999 ex VAT) **CONTACT** Panrix 0113 244 4958

PROS Very fast 3D performance; massive hard drive **CONS** Poor monitor; no extras

OVERALL A reasonable system, but due to the poor monitor it's not a winner

FEATURES ■■■■■ **PERFORMANCE** ■■■■■

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Panrix has gone down the Athlon XP route, as have so many others this month, and supplied a 1600+ chip and a healthy 512MB of PC2100 DDR SDRAM fitted to an Asus A7M266 motherboard. The only problem is that the two sticks of memory take up the two available memory slots on this board and so you have to discard some or all of it when you want to upgrade. Fortunately, this shouldn't be an issue for a while yet.

Graphics are in the capable hands of a Leadek GeForce3 with 64MB of DDR memory that features both DVI and S-Video out. Panrix has gone for the slightly odd sound combination of a VideoLogic Sonic Fury and a set of Cambridge Soundworks DTT 2200 speakers. Although it sounds fine, it's not a very common setup. Rounding off the add-on cards is a standard 56K PCI modem and a bracket for two extra USB ports.

This is one of only two systems here to feature a 100GB hard drive

and it should be enough for even the most demanding users for the foreseeable future.

Around the front is a TDK Cyclone CD writer capable of writing CDs at 24-speed and CD-RWs at 10-speed, as well as a 16-speed Hitachi DVD-ROM drive. The monitor is a slightly lower-end model than has been the norm this month: a Mitsubishi Diamond Plus 73, with a top flicker-free resolution of 1,152 x 864.

Where Panrix earns extra points is in the choice of case. It's one of the roomiest on test, although some might find it a bit too big and noisy – the massive 120mm fan around the back keeps the system very cool, but creates quite a lot of noise.

It's a shame Panrix hasn't thrown in any extras – this is a Christmas machine, after all. Had it done so, it would have fared much better against the competition, but as it stands it's only slightly above the group's average.

Polar Proton 1400

PRICE £1,173.83 (£999 ex VAT) **CONTACT** Polar 0800 138 1238

PROS Printer and scanner; USB networking; speakers **CONS** Graphics card; speed

OVERALL An otherwise adequate machine is let down by an underspecified graphics card

FEATURES ■■■■■ **PERFORMANCE** ■■■■■
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Polar is the third and final company this month to supply a 1.4GHz Athlon system, albeit a bit faster than the other two, but still easily beaten by the faster Athlon XPs. There's nothing inside this machine to get excited about, but Polar has thrown in a couple of extras, namely an Epson Stylus C40UX printer and an HP ScanJet 3400C. However, the cost of these extras seems to have compromised other parts of the system. The PC does, however, come with a healthy 512MB of PC2100 DDR SDRAM, filling two out of three memory slots, which should help the overall performance.

To make room for the printer and scanner, costs have been cut in the graphics arena, where an Inno3D GeForce2 MX400 card has been installed. This is well below par, even though it features both 64MB of graphics memory and TV-out.

The MSI K7T266 motherboard does not sport the extra onboard EIDE

RAID chip, but it does have onboard USB networking and offers five USB ports around the back. Further down the card stack, we find a Creative SoundBlaster Live! 5.1 and a 56K PCI modem, both of which are pretty standard components. What is interesting is the inclusion of a set of VideoLogic DigiTheatre LC speakers, as this and the Creative card is an unusual combination.

Storage is catered for by a 41GB IBM Deskstar hard drive with a spindle speed of 7,200rpm. Optical discs are handled by a Teac CD-RW capable of writing at 16-speed and rewriting at 10-speed, and a 16-speed Toshiba DVD-ROM.

Finally, there is a 17in Mitsubishi Diamond Pro 730 monitor which is a capable unit that supports flicker-free resolutions of up to 1,600 x 1,200 at 75Hz. Overall, not a bad attempt, but the poor choice of graphics card means this isn't the best choice for a games fanatic.



Systemax A1700JW

PRICE £1,173.83 (£999 ex VAT) **CONTACT** Systemax 08707 297 336

PROS Printer and scanner; TV-tuner; webcam **CONS** Monitor; speed

OVERALL For a first-timer this is an excellent system. Shame about that monitor, though

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Systemax has put together quite a bundle this month, although it's not entirely without faults.

The core of the system is an Athlon XP 1700+ (1.47GHz) that's bundled with 256MB of PC2100 DDR SDRAM, which makes this system a bit less well specified than some of the competition, a fact that is borne out in the benchmark results. But despair not, as it's not far behind and Systemax has included a few extras on the side to even the balance.

This PC is built on the MSI K7T266 motherboard, but Systemax hasn't included either the extra USB connectors or the USB networking. A Gainward GeForce2 Ti 450 with 64MB of DDR memory and TV-out would be a reasonable card for most users apart from the hardcore gamers – but a GeForce3 would have been better.

The sound system consists of a Creative SoundBlaster Live! 5.1 and a set of Cambridge Soundworks DTT

2200 speakers, which is a common combination at this price. Systemax has also thrown in an ATI TV-tuner and a 56K PCI modem.

Where the Systemax is a little weak is in the area of storage, where the 41GB IBM Deskstar hard drive is a bit stingy compared to others. Around the front are two Samsung devices; a CD-RW capable of writing CDs at 16-speed and CD-RWs at 10-speed, and a 16-speed DVD-ROM.

The CTX EX710F monitor is not the best we've seen. It is capable of flicker-free resolutions of up to 1,600 x 1,200 at 75Hz, but others produce better images at the same resolution.

And for that little extra Christmas fun, there is a Umax Astra 2100U scanner and an Epson Stylus Color 680 printer as well as a Creative WebCam Plus and a Microsoft Side-winder USB Gamepad. Overall, not a bad system, but it doesn't quite keep up with some of the competition this month in terms of performance.



GROUP TEST £999 WINDOWS XP SYSTEMS

Time Machine 1500+ VQ Flex

PRICE £1,173.83 (£999 ex VAT) **CONTACT** Time 0870 830 3101

PROS 3D performance; FireWire card **CONS** Slower processor; only 256MB of memory

OVERALL A good performer that doesn't quite reach the peak this month

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Time supplied the slowest processor in terms of raw MHz this month. That said, the Athlon XP 1500+ (running at 1.33GHz) is outperforming its older 1.4GHz brother in all our benchmarks. It's a shame that Time only supplied 256MB of PC2100 DDR SDRAM as memory prices are at a record low at present, but the money it has saved has been well spent on other components.

The Gigabyte GA-7DX motherboard is not the most feature-rich on the market, but is nonetheless a respectable performer. What Time did spend some money on is the MSI GeForce3 graphics card with video-in and out, and this card really proves its worth in our 3D benchmarks.

Almost every machine this month has some kind of FireWire solution, be it a standalone card or built in to the new Audigy sound cards. Time has followed suit and included a three-port card with an extra connector inside the system.

The sound setup consists of a Creative SoundBlaster Live! 5.1 and a set of Cambridge Soundworks DTT 2200 speakers. Finally, there is a standard 56K PCI modem. As with most systems on test, there is ample storage space in the shape of a 60GB Seagate Barracuda hard drive.

There is a 12-speed write, eight-speed rewrite LG CD-RW and a 16-speed Toshiba DVD-ROM drive. The budget LG Flatron 775FT monitor is not quite up to the rest of the system. Although this is a good monitor it has a rather limited flicker-free resolution of 1,152 x 864 at 75Hz.

Time has thrown in a basic digital camera that doubles as a web camera. Unfortunately this is more of a gadget than of any practical use.

Overall system performance is not bad, but where this system shows off is in our 3D benchmarks. This is a very impressive combination from Time, but it's not quite enough to earn it this month's Editor's Choice.



Tiny Home Entertainment 1500

PRICE £1,173.83 (£999 ex VAT) **CONTACT** Tiny 0800 783 9812

PROS Great digital camera; printer **CONS** Poor performance in general

OVERALL If you're after a P4 go elsewhere as this is not a good performer nor will it last

FEATURES ■■■■■ **PERFORMANCE** ■■■■■
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As the only manufacturer to supply a Pentium 4 system this month, Tiny stands out from the crowd. Furthermore it is also the only micro ATX system here, which makes it less suited to those who like to tinker around inside their machines.

The Tiny is based on a 1.5GHz P4 processor, but we were disappointed when we found a Socket 423 processor under the hood rather than the more recent Socket 478 version. This will make future upgrades difficult. Bundled with this are two sticks of RDRAM with a combined capacity of 256MB. All this has been fitted to an MSI microATX motherboard and it lacks some of the expandability of a full-size board.

We were a bit disappointed to find only an MSI GeForce2 MX 400 graphics card with 64MB of memory, which severely hampers 3D performance and makes this the slowest machine in our 3D benchmarks. The sound system is built using a Creative

SoundBlaster Live! 5.1 and a set of the familiar Cambridge Soundworks DTT 2200 speakers. The final card in this PC is a V.90 56K CNR modem.

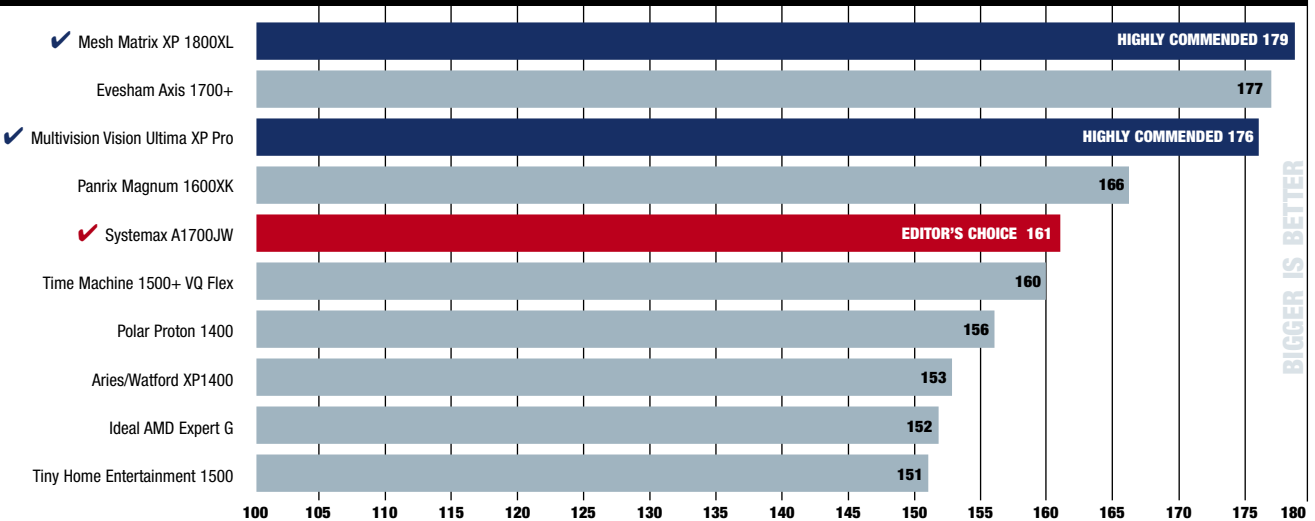
Storage is handled by a 40GB Quantum hard drive, which is a little small in this month's company. Around the front is a Ricoh CD writer that is also one of the faster models in this group, burning CDs at 20-speed and CD-RWs at 10-speed. Above that is a 16-speed DVD-ROM drive from LG, and at the bottom of the case are two front-mounted USB ports.

The monitor is the brilliant LG Flatron 795FT Plus that we've seen with quite a few systems this month. It gives you a further four USB ports around the back through its built-in USB hub. All these USB ports might just come in handy as Tiny has supplied an Epson Stylus C20UX printer (USB only) and a Fujifilm FinePix 2600Zoom digital camera, which has a respectable 2.1mega-pixel resolution and 3x optical zoom.

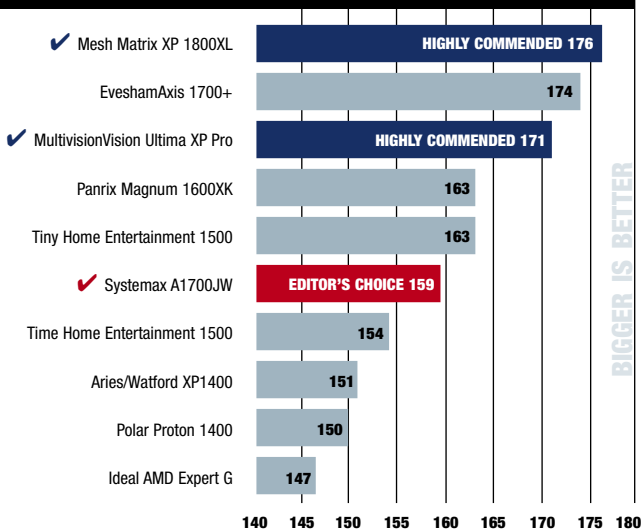


LAB RESULTS

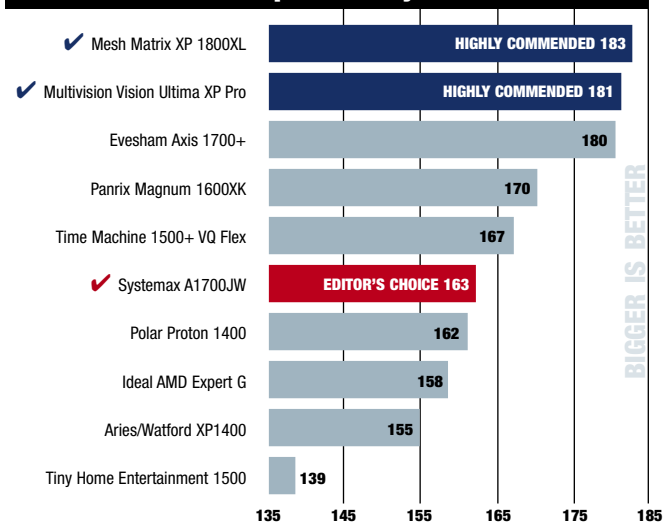
SYSmark 2001 overall



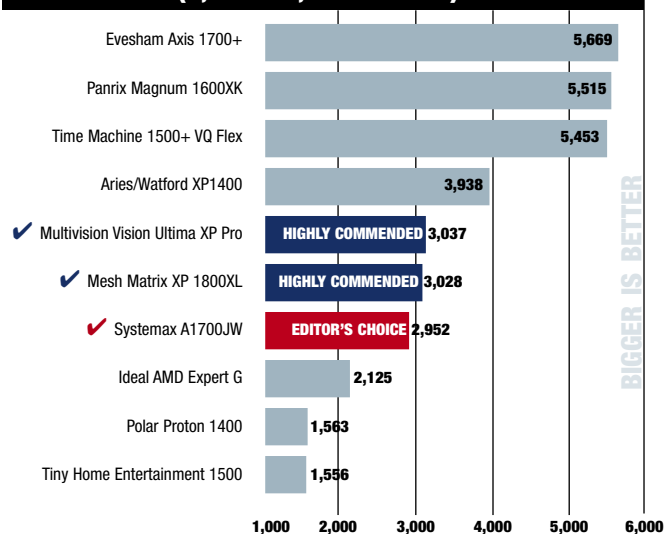
SYSmark 2001 Internet content creation



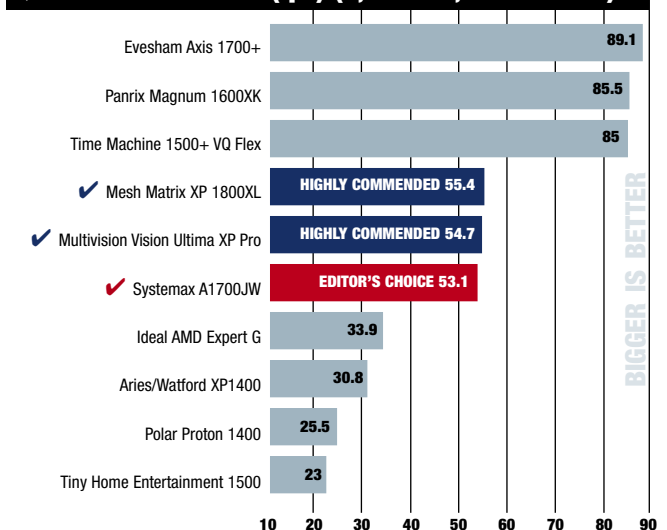
SYSmark 2001 office productivity



3DMark 2001 (1,280 x 1,024 at 32bit)



Quake III Team Arena (fps) (1,280 x 1,024 at 32bit)



Please see page 58 for an explanation of how we tested the PCs

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MANUFACTURER	ARIES/WATFORD	EVESHAM	IDEAL COMPUTING	MESH
MODEL NAME	XP1400 PC SYSTEM	AXIS 1700+	AMD EXPERT G	MATRIX XP 1800XL
Price inc VAT (ex VAT)	£1,173.85 (€999)	£1,173.85 (€999)	£1,173.85 (€999)	£1,173.85 (€999)
Sales telephone	0870 220 0700	0870 160 9500	0870 745 5061	020 8208 4706
URL	www.watford.co.uk	www.evesham.com	www.ideal-computing.co.uk	www.meshplc.com
HARDWARE SPECS				
Processor	AMD Athlon 1.4GHz	AMD Athlon XP 1700+ (1.47GHz)	AMD Athlon 1.4GHz	AMD Athlon XP 1800+ (1.53GHz)
RAM/type	512MB PC2100 DDR SDRAM	512MB PC2100 DDR SDRAM	256MB PC2100 DDR SDRAM	512MB PC2100 DDR SDRAM
Occupied RAM slots/spare RAM slots	2/1	2/1	1/2	2/1
Max memory in this configuration	1GB	1GB	1.2GB	1GB
Maximum memory supported by motherboard	1.5GB	1.5GB	1.5GB	1.5GB
Hard disk (manufacturer, model and spin speed)	Seagate Barracuda ATA IV 7,200rpm	Maxtor DiamondMax Plus 740DX 7,200rpm	Quantum Fireball AS 7,200rpm	Western Digital WD600BB 7,200rpm
Hard disk size/interface (UltraDMA66/100 or SCSI)	40GB UltraDMA100	60GB/UltraDMA100	2 x 30GB/UltraDMA100	60GB UltraDMA100
Storage drive manufacturer and model	Liteon LT24102B	Samsung SW-216B	Samsung SW-212B	Teac CD-W516EB
MOTHERBOARD COMPONENTS				
Motherboard manufacturer	MSI	Asus	Gigabyte	Asus
Model/chipset	K7T266 Pro/VIA KT266	A7V266/VIA KT266	GA-7ZXR/AMD761 - VIA686B	A7V266/VIA KT266
EXPANSION AND I/O				
No of 3.5/5.25in bays	3/4	4/3	3/3	3/3
No of free 3.5/5.25in bays	1/2	2/1	1/0	1/1
No of PCI/ISA/shared/AMR slots	4/0/1/0	4/0/1/0	5/0/1/0	4/0/1/0
No of free PCI/ISA/shared/AMR slots	2/0/1/0	2/0/1/0	3/0/0/0	2/0/0/0
No of USB/serial/parallel/PS/2	3/2/1/2	2/2/1/2	2/2/1/2	4/2/1/2
MULTIMEDIA				
DVD manufacturer/model	Liteon LTD163	Samsung SD-616F	Shuttle SDVD112	Pioneer DVD116
DVD speed/interface	16x/EIDE	16x/UltraDMA66	12x/EIDE	16x/UltraDMA66
Sound card manufacturer	Creative	Creative	Creative	Creative
Sound card model	SoundBlaster Audigy	SoundBlaster Audigy	SoundBlaster Live! 5.1	SoundBlaster Audigy
Speakers (manufacturer and model)	Creative Inspire 5300	Cambridge Soundworks DTT 2200	Cambridge Soundworks DTT 2200	Cambridge Soundworks DTT 2200
Graphics card manufacturer and model	Leadtek WinFast GeForce3 TDH	Leadtek WinFast GeForce3	ATI Radeon VVo	Leadtek GeForce2 Ti
Chipset	nVidia GeForce3	nVidia GeForce3	ATI Radeon	nVidia GeForce2 Ti
Memory and type	64MB DDR SDRAM	64MB DDR SDRAM	64MB DDR SDRAM	64MB DDR SDRAM
Graphics card interface	AGP	AGP	AGP	AGP
Monitor manufacturer and model	AOC 7Klr	LG Flatron 795FT Plus	LG Flatron 775FT	Mitsubishi Diamond Plus 92
Monitor size/max viewable diagonal	17in/16in	17in/16in	17in/16in	19in/18in
Maximum resolution at VESA refresh	1,600 x 1,200 at 75Hz	1,600 x 1,200 at 75Hz	1,152 x 864 at 75Hz	1,600 x 1,200 at 75Hz
OTHER INFORMATION				
Modem manufacturer and model	Intel HaM 56K V.90	Smart Link 56K V.90	Best 56K V.90 PCI	Best 56K V.90 PCI
Misc hardware	Onboard USB networking		FireWire Card	
Bundled software	Microsoft Works 2001	Sun StarOffice 5.2	Sun StarOffice	Microsoft Works Suite 2001
Standard warranty (RTB = return to base, C&R = collect and return)	1yr on site 2yrs RTB	2yrs on site 1yr RTB	1yr on site 2yrs RTB	1yr on site 2yrs RTB

* RTB = return to base, C&R = collect and return



MULTIVISION	PANRIX	POLAR TECHNOLOGY	SYSTEMAX	TIME	TINY
VISION ULTIMA XP PRO	MAGNUM 1600XK	PROTON 1400	A1700JW	MACHINE 1500+ VQ FLEX	HOME ENTERTAINMENT 1500
£1,173.85 (£999)	£1,173.85 (£999)	£1,173.85 (£999)	£1,173.85 (£999)	£1,173.85 (£999)	£1,173.85 (£999)
0870 066 0885	0113 244 4958	0800 138 1238	08707 297 366	0870 830 3101	0800 783 9812
www.multivision.co.uk	www.panrix.com	www.polartechnology.com	www.systemax.co.uk	www.timecomputers.com	www.tiny.com
AMD Athlon XP 1800+ (1.55GHz)	AMD Athlon XP 1600+ (1.4GHz)	AMD Athlon 1.4GHz	AMD Athlon XP 1700+ (1.47GHz)	AMD Athlon XP1500+ (1.33GHz)	Intel Pentium 4 1.5GHz
256MB PC2100 DDR SDRAM	512MB PC2100 DDR SDRAM	512MB PC2100 DDR SDRAM	256MB PC2100 DDR SDRAM	256MB PC2100 DDR SDRAM	256MB PC800 RDRAM
1/2	2/0	2/1	1/2	1/1	2/4
1.2GB	512MB	1GB	1.2GB	768MB	1.2GB
1.5GB	1GB	1.5GB	1.5GB	1GB	2GB
Western Digital WD1000BB 7,200rpm	Western Digital WD1000BB 7,200rpm	IBM Deskstar 7,200rpm	IBM Deskstar 7,200rpm	Seagate Barracuda ATA IV 7,200rpm	Quantum Fireball Plus 7,200rpm
100GB UltraDMA100	100GB UltraDMA100	41GB UltraDMA100	41GB UltraDMA100	60GB UltraDMA100	40GB
Mirai CRD-BP1500P	TDK CDRW241040X	Teac CD-W516EB	Samsung SW-216B	LG CED-8120B	Ricoh MP7200A
MSI	Asus	MSI	MSI	Gigabyte	MSI
K7T266 Pro/VIA KT266	A7M266/AMD761 - VIA 686B	K7T266 Pro/VIA KT266	K7T266 Pro/VIA KT266	GA-7DX	MS-6385/850
4/4	4/3	5/2	3/3	4/3	3/2
2/2	2/1	3/0	1/1	2/1	1/0
4/0/1/0	4/0/1/0	4/0/1/0	4/0/1/0	5/0/0/1	2/0/1/0
1/0/1/0	2/0/0/0	2/0/0/0	1/0/1/0	2/0/0/0	1/0/0/0
4/2/1/2	4/2/1/2	5/2/1/2	2/2/1/2	4/2/1/2	2/2/1/2
Pioneer DVD116	Hitachi GD-8000	Toshiba SD-M1502	Samsung SD-616F	Toshiba SD-M1502	LG DRD8120B
16x/UltraDMA66	16x/EIDE	16x/EIDE	16x/UltraDMA66	16x/EIDE	16x/EIDE
VideoLogic	VideoLogic	Creative	Creative	Creative	Creative
Sonic Fury	Sonic Fury	SoundBlaster Live! 5.1	SoundBlaster Live! 5.1	SoundBlaster Live! 5.1	SoundBlaster Live! 5.1
Cambridge	Cambridge	VideoLogic DigiTheatre LC	Cambridge	Cambridge	Cambridge
Soundworks DTT 2200	Soundworks DTT 2200	Soundworks DTT 2200	Soundworks DTT 2200	Soundworks DTT 2200	Soundworks DTT 2200
Leadtek GeForce2 Ti	Leadtek WinFast GeForce3 TDH	Inno3D GeForce2 MX400	Gainward GeForce2 Ti 450	MSI GeForce3 Vivo	MSI MS-8826
nVidia GeForce2 Ti	nVidia GeForce3	nVidia GeForce2 MX400	nVidia GeForce2 Ti	nVidia GeForce3	nVidia GeForce2 MX400
64MB DDR SDRAM	64MB DDR SDRAM	64MB SDRAM	64MB DDR SDRAM	64MB DDR SDRAM	64MB SDRAM
AGP	AGP	AGP	AGP	AGP	AGP
Hansol 920D	Mitsubishi Diamond Plus 73	Mitsubishi Diamond Pro 730	CTX EX710F	LG Flatron 775FT	LG Flatron 795FT Plus
19in/18in	17in/16in	17in/16in	17in/16in	17in/16in	17in/16in
1,600 x 1,200 at 75Hz	1,152 x 864 at 75Hz	1,600 x 1,200 at 75Hz	1,600 x 1,200 at 75Hz	1,152 x 864 at 75Hz	1,600 x 1,200 at 75Hz
ESS ES56T-PI 56K V.90	Diamond SupraExpress 56i	Lucent Winmodem 56K V.90	Generic 56K V.90 PCI	Generic 56K V.90 PCI	CNR 56K V.90
FireWire card		Epson Stylus C40UX printer,	Ati TV-Wonder, Umax Astra	FireWire card, digital/	Fuji FinePix 2600Zoom
Thrustmaster Gamepad,		HP ScanJet 3400C scanner,	2100U scanner, Epson Stylus	web camera	digital camera, Epson Stylus
Logitech Webcamera		onboard USB networking	Color 680 printer, Sidewinder		C20UX printer
Games pack, Lotus		Lotus SmartSuite	Lotus SmartSuite	Time GT XP 1 software pack,	Microsoft Works Suite 2001
SmartSuite Millennium		Millennium	Millennium, games pack	including StarOffice, games pack	
1yr on site, 2yrs RTB	1yr on site, 2yrs C&R	1yr on site, 2yrs RTB	1yr on site, 2yrs RTB	3yrs C&R	3yrs on site

Editor's Choice

There's no denying that Windows XP is a significant development in an already successful product line and, just in time for Christmas, we got the chance to put 10 PCs running the new OS through their paces.

We were also able to test a new line of processors – the Athlon XP appears in various incarnations in more than half the systems we received for this test. Also new this month was the Creative Inspire 5300 speakers that came with the Aries system. These will replace the current DTT 2200 range and we expect to see more of them in the near future.

This month's group test was the first outing for Creative's Audigy range of sound cards. This card incorporates FireWire as standard, which creates a lot of opportunities for PC manufacturers to supply supplementary hardware. Most of the systems that came with the older SoundBlaster Live! 5.1 also came with a FireWire card fitted, which makes it nearly as good an offering as the new Audigy cards. Sadly not many of the machines featured any video-in capabilities apart from FireWire, so unless you have a new DV camcorder you won't really be able to take full advantage of the video-editing capabilities of these systems.

With Christmas on the horizon, we had hoped to see some other goodies thrown in, although this was left very much up to each manufacturer to decide for itself. We were pleasantly surprised that a few vendors supplied massive 100GB hard drives, even at the relatively conservative £999 price point. With this in mind we move on to the winners.

The winners

It can sometimes be a disadvantage not being the fastest machine in town, but Systemax submitted a well-balanced system with an excellent Christmas bundle that deserves the **Editor's Choice** award. The **Systemax A1700JW** system is built around the Athlon XP 1700+, which is a more than capable processor. This system also comes with our stated minimum of 256MB of memory, but this should be more than enough for the near future. Our only complaint was the 41GB hard drive which, incredibly, was one of the smallest this month. The rest of

the system more than makes up for that deficiency, though, so it's something we can easily overlook.

The other notable absentee here was a GeForce3 graphics card – the card of choice is a GeForce2 Pro, which should still be good enough for even the most hardcore gamers. What sets this system apart, though, is the excellent bundle that is included. There is an ATI TV-tuner, a Umax scanner, an Epson printer, a Microsoft Gamepad and a Creative web camera. All this makes the Systemax an excellent first-time buy.

Our first **Highly Commended** award this month goes to Mesh, which was one of two companies to supply an Athlon XP 1800+ as well as a 19in monitor. The **Mesh Matrix XP 1800XL** is not the ideal Christmas bundle, though, as it doesn't come with any extras. However, it's hard not to commend Mesh as it has submitted an excellent machine that outperforms the competition in SYSmark 2001 tests. Its 3D scores are not quite as good, though. For the money you get 512MB of memory, a 60GB hard drive and a copy of Microsoft Works Suite 2001. This is a bit on the thin side compared to the Systemax system, but you do get a SoundBlaster Audigy and that 19in Mitsubishi monitor. Overall this is a good performer with excellent components, but it lacks a bit of that essential Christmas feeling.

Next up is **Multivision** with its **Vision Ultima XP Pro**, which also includes an Athlon XP 1800+ and a 19in monitor. This alone doesn't make a winner, even though it adds to the system's overall value. What really impressed us, though, was the 100GB hard drive. Most users would not be currently able to fill this even if they tried. As the years go by, though, we have no doubt we'll be eating those words. Sadly there is no Audigy card in this system, but it does come with a Creative SoundBlaster Live! 5.1 and a FireWire card, which is almost as good.

As far as Christmas goodies are concerned you get a Trustmaster gamepad and a Logitech web camera; not as great as the Systemax bundle, but some good toys all the same.

Also worthy of a mention are Evesham and Polar, which both submitted fine machines but didn't quite make it to the winners' podium.



Systemax A1700JW



Mesh Matrix XP 1800XL



Multivision Vision Ultima XP

It can be a disadvantage not being the fastest machine in town