SUPERBUDGET PCs

Details	Last month's position	First reviewed	PC World-Bench 4	Price (ex VAT)	Warranty	Processor type/speed	RAM	Hard disk/capacity	Mother-board	Chipset	Modem	USB ports		Monitor	Screen size	Dot pitch	Max resolution @75Hz	Graphics card	Graphics chip	Graphics card memory	Sound card	Speakers	No of speakers/subwoofer	DVD-ROM speed	CD-RW read/write/rewrite rate	Operating system, software & other extras
1 Multivision Vision Elite 4200 0870 066 0882 www.multivision.co.uk	1	Oct 02	119	£699	3-year onsite, 3-year labour	AMD Athlon XP 2100+/1.73GHz	256MB DDR RAM	IBM/80GB	MSI	Via KT333	56K	4		Mitsubishi Diamond Pro 740SB	17in	0.25mm	1,600x1,200	nVidia GeForce4 Ti 4200	nVidia GeForce4 Ti 4200	64MB	onboard	Videologic ZXR 500	5/yes	16x	48x/40x/12x	Windows XP Home, Lotus SmartSuite 9.7
2 Carrera SSC Octan 2100a 0871 222 3456 www.carrera.co.uk	2	Oct 02	117	£699	2-year onsite, 3-year labour	AMD Athlon XP 2100+/1.73GHz	256MB DDR RAM	IBM/80GB	Asus A7V333	Via KT266A	56K	6		NEC FE770	17in	0.25mm	1,024x768	Asus GeForce4 Ti 4200	nVidia GeForce4 Ti 4200	64MB	Creative Labs Audigy	Cyber Acoustics 5.1	5/yes	16x	40x/40x/10x	Windows XP Home, Ability Office
3 Ideal Computing Aptus L150 0870 745 5061 www.idealcomputing.co.uk	3	Oct 02	115	£699	1-year onsite, 4-year labour	AMD Athlon XP 2000+/1.68GHz	512MB DDR RAM	Maxtor/80GB	Chaintech Apogee 7VJL	Via KT333	56K	6		Iiyama Vision Master Pro 413	17in	0.25mm	1,600x1,200	Chaintech GeForce4 MX 440	nVidia GeForce4 MX 440	64MB	onboard	Mercury Home Theatre	4/yes	16x	48x/40x/16x	Windows XP Home, Sun Open Office
4 PC World Advent 3810 BTO 0870 546 4464 www.pcworld.co.uk	4	Oct 02	120	£699	1-year onsite	AMD Athlon XP 2000+/1.68GHz	256MB DDR RAM	Maxtor/60GB	Gigabyte GA7VRXP	Via KT266A	56K	8		Samsung SyncMaster 753 DFX	17in	0.25mm	1,024x768	nVidia GeForce4 MX 440	nVidia GeForce4 MX 440	64MB	Creative Labs Soundblaster 5.1	Videologic ZXR 500	5/yes	16x	40x/32x/12x	Windows XP Home, Microsoft Works 6.0
5 NetHighStreet Net PA699 0870 777 5252 www.nethighstreet.com	5	Oct 02	114	£699	1-year onsite	AMD Athlon XP 2000+/1.68GHz	256MB DDR RAM	IBM/60GB	Asus A7V333	Via KT266A	56K	4		Hansol 710D	17in	0.25mm	1,280x1,024	MSI MS StarForce GeForce4 Ti 4200	nVidia GeForce4 Ti 4200	64MB	onboard	Creative FPS1600	4/yes	16x	40x/32x/10x	Windows XP Home, Lotus SmartSuite 9.7
6 Systemax Inspire 7152 0870 729 7364 www.systemaxpc.co.uk	6	Oct 02	119	£699	1-year collect and return, 2-year labour	AMD Athlon XP 2200+/1.8GHz	256MB DDR RAM	IBM/60GB	MSI MS6380E	Via KT333	56K	4		CTX EX700F	17in	0.25mm	1,280x1,024	Gainward GeForce4 MX 440	nVidia GeForce4 MX 440	64MB	onboard	Videologic ZXR 500	5/yes	16x	40x/32x/10x	Windows XP Home, Lotus SmartSuite 9.7
7 Cybyte XP2000RDG 01603 455 554 www.cybyte.co.uk	7	Oct 02	119	£699	2-year return to base	AMD Athlon XP 2000+/1.68GHz	256MB DDR RAM	Maxtor/60GB	MSI KT3 Ultra	Via KT333	56K	4		NEC FE770	17in	0.25mm	1,024x768	nVidia GeForce4 Ti 4200	nVidia GeForce4 Ti 4200	64MB	onboard	Hercules XPS210 2.1	2/yes	16x	48x/40x/12x	Windows XP Home
8 Mesh Matrix XP 2100+ SB Pro 020 8208 4744 www.meshcomputers.com	8	Oct 02	113	£699	3-year collect and return	AMD Athlon XP 2100+/1.73GHz	256MB DDR RAM	Maxtor/60GB	Asus A7V333	Via KT333	56K	4		NEC FE770	17in	0.25mm	1,024x768	ATI Radeon 8500LE	ATI Radeon 8500LE	64MB	Creative Labs Soundblaster 5.1	Creative Inspire 5300	5/yes	16x	48x/40x/12x	Windows XP Home, Lotus SmartSuite 9.7
9 Mesh Matrix XP 1800+ SBPC 020 8208 4744 www.meshcomputers.com	9	Jul 02	115	£649	3-year onsite	AMD Athlon XP 1800+/1.53GHz	256MB DDR RAM	Maxtor/40GB	Asus A7V333	Via KT333	56K	6		NEC/Mitsubishi MS 75F	17in	0.25mm	1,024x768	nVidia GeForce4 MX 440	nVidia GeForce4 MX 440	64MB	onboard	Creative FPS1600	4/yes	16x	48x/40x/12x	Windows XP Home, Lotus SmartSuite 9.7
10 Systemax Inspire A1700G 0870 729 7364 www.systemaxpc.co.uk	10	Jul 02	113	£649	1-year collect and return, 2-year labour	AMD Athlon XP 1700+/1.47GHz	256MB DDR RAM	IBM/60GB	MSI MS6380E	Via KT333	56K	4		CTX EX700F	17in	0.25mm	1,280x1,024	Gainward GeForce4 MX 450	nVidia GeForce4 MX 420	64MB	onboard	Systemax CA4400	4/yes	16x	40x/32x/10x	Windows XP Home, Lotus SmartSuite 9.7

← High-quality components and a generous warranty make the Multivision Vision Elite a deserved winner

1 Multivision Vision Elite 4200

Multivision holds on to its Best Buy award this month due to the Vision Elite 4200's impressive combination of quality components and a generous warranty. Based around AMD's Athlon XP 2100+ processor, the Multivision comes with 256MB of DDR (double data rate) RAM and an 80GB IBM hard drive. This specification results in a WorldBench 4 score of 119, making the Vision Elite the second speediest system in the chart.

Multivision has opted for a graphics card that is at the lower end of the GeForce4 Titanium family, but the Ti 4200 still offers excellent performance. While running the Quake III Annihilator demo at a resolution of 1,024x768, the 4200 achieved an astonishing 83fps (frames per second) – a rate not often seen in the Power category let alone the Superbudget chart.

The monitor is another of the Multivision's many strengths – the Mitsubishi Diamond Pro 740SB is currently our Recommended display in the 17in Monitor chart and offers a clear, crisp screen whether or not the SuperBright function is enabled. It will also easily handle a resolution of 1,600x1,200 at 75Hz, something not many other 17in monitors can do. The Elite's audio capabilities may be onboard, but it's still capable of providing six-channel sound for the Videologic ZXR 500 speaker system.

Where this Multivision system really stands out, though, is in terms of warranty – three years' onsite cover is good, but you'll also get a further three years' labour-only cover on top of that.

2 Carrera SSC Octan 2100a

Providing stiff competition for the prestigious Best Buy position is Carrera, submitting a system as remarkable in terms of performance as it is in terms of styling. The Octan 2100a's Athlon XP 2100+ processor helped it achieve a respectable WorldBench 4 score of 117. Offering 80GB of storage space and 256MB of DDR (double data rate) RAM on top of that, the specification is top-notch.

But the real talking point about the Octan is the experimental design of the

↓ The Carrera's distinctive case holds a nifty and impressive system

casing. PC manufacturers for the most part are very tentative about abandoning the beige box model when creating new systems, so it's nice to see Carrera pushing the boat out and trying to change our perception of the PC. One nice touch is the carrying handle at the top – not an original idea, but still a good one.

However, the unusual design is not without its faults. The flap that opens to allow the CD-RW drive's tray to eject is liable to get stuck and the lack of cover on the DVD drive is a constant reminder that this is, in fact, just a beige box with some coloured plastic panels screwed on.

Whether or not the design takes your fancy, the Octan 2100a is a good system that's slightly let down by the average NEC FE770 monitor. The graphics card is an Asus GeForce4 Ti 4200, which is on a par with Multivision's nVidia card. Coupled with a Creative Labs Audigy sound card and Cyber Acoustics 5.1 speaker system, this is a great choice for a multimedia entertainment centre. The warranty is good, too, with two years' onsite followed by three years' labour-only cover.

3 Ideal Computing Aptus L150

In third place this month is Ideal Computing's Aptus L150. Unlike the Best Buy Multivision and the Recommended Carrera, the Aptus L150 only has an Athlon XP 2000+ processor. Where it really holds the advantage over the top two Superbudget entries, though, is with its 512MB of DDR (double data rate) RAM – 256MB more than any other system in the chart and an unusually generous amount for a Superbudget system.

However, despite the extra memory, the Aptus couldn't produce any performance advantage. The system was beaten by both the Vision Elite and the Octan's WorldBench 4 score, gaining a middling 115. The generous 80GB hard drive, though, will give you plenty of room to store your data.

The L150 houses a Chaintech GeForce4 MX 440 graphics card – a decent chip that doesn't quite come up to the standard of the GeForce4 Ti 4200. Still, the Aptus managed to produce 66fps (frames per second) in Quake III's Annihilator demo at a resolution of 1,024x768. The monitor is another bonus – the Iiyama Vision Master Pro 413 is our

↑ The Aptus L150's processor is not the fastest, but this PC has bags of RAM and a huge hard drive

current Best Buy 17in CRT (cathode ray tube) display, thanks to its vibrant rendering of colour and precise text definition (see page 142).

Manufacturers have to cut corners when designing low-cost systems and Ideal Computing is no exception. It has opted for an onboard audio chip, while only offering the Mercury Home Theatre speaker system with four satellites and a subwoofer. The warranty lasts five years, though, even if you do only get onsite cover for the first year.

SUPERBUDGET PCs

4 PC World Advent 3810 BTO

Taking the final Recommended award is the PC World Advent 3810 BTO. Offering good-quality components and strong performance the Advent achieved the highest Superbudget WorldBench 4 score in the chart, clocking up an impressive 120 points.

The Athlon XP 2000+ processor may not be AMD's latest or fastest chip but PC World has teamed it with a good set of components, including a 60GB Maxtor hard drive, 256MB of DDR (double data rate) RAM and an nVidia GeForce4 MX 440 graphics card. And the Advent works these components to their full potential.

The 3810 features a standalone Creative Labs SoundBlaster 5.1 sound card which the Videologic ZXR 500 speakers make full use of. The SyncMaster monitor offers a good-quality display and, for those of you who need to hook up peripherals to your PC, there are eight USB ports. In terms of software, Microsoft Works 6.0 is included.

↑ The Advent has good audio and graphics, and gains this month's highest score in our WorldBench 4 test

↓ Although it doesn't stand out from the crowd, the NetHighStreet is a solid all-round system

5 NetHighStreet Net PA699

Narrowly missing out on a Recommended award this month is the latest offering from NetHighStreet, which offers a decent all-round specification and performance without excelling in any particular area. The AMD Athlon XP 2000+ processor, 256MB of DDR (double data rate) RAM and 60GB IBM hard drive combined to give the Net PA699 a respectable WorldBench 4 score of 114.

NetHighStreet has opted for an MS StarForce graphics card, which allowed for reasonable performance in our graphics tests. The Hansol 710D monitor is also a fair performer, even though it will never win any prizes for its design. The onboard chip means that sound isn't the PA699's strong point, but the Creative FPS1600 speakers can still produce decent audio. In terms of cover, the warranty only lasts for one year but during that time you do get onsite assistance.

6 Systemax Inspire 7152

AMD's third fastest processor is the driving force behind the Systemax Inspire 7152. This is the first Superbudget system to feature the Athlon XP 2200+ chip and consequently scored a speedy 119 in our WorldBench 4 tests.

However, in order to keep the price low, Systemax has had to compromise in other areas. In particular, the Inspire 7152's monitor, the CTX EX700F, is basic to say the least. The graphics card is a Gainward GeForce4 MX 440 which, again, isn't the best, but performs adequately. The onboard sound facilities are teamed up with Videologic's ZXR-500 speakers. There's a 16-speed DVD drive and backup is provided by a 40-/32-/10-speed (read/write/rewrite) CD-RW drive. The 60GB IBM hard disk and 256MB of DDR (double data rate) RAM round off a solid set of specifications. One disappointment is the warranty – one-year collect-and-return followed by two-year labour-only cover won't give you peace of mind.

↑ The Systemax may have the fastest AMD chip in the chart, but it has had to economise on the monitor

How many megabytes?

When purchasing your PC you should be aiming to get at least 256MB of DDR (double data rate) RAM – this even applies in a sub-£700 system. However, if you are on a tight budget there is always the option of settling for just 128MB and buying more memory at a time when you can afford it.

An important thing to consider when buying a PC is how much room there is inside to upgrade or how easy it is to add to the existing memory. This is all dictated by which motherboard the system has.

Many motherboards have two Dimm (dual inline memory module) slots and some even have three. The Dimm slots are located immediately to the right of the processor on a standard motherboard. The more free Dimm slots there are in the PC, the easier it will be to add to the memory.

There's no problem with putting two modules of different values alongside each other – for example, a module of 128MB can sit next to a module of 512MB. However, you would be best advised to make sure the memory is of the same type. PC2100 (DDR 266) and PC2700 (DDR 333) are the most commonly used types of memory and they run at different clock speeds – if you run a module of PC2100 with one of PC2700 they will both run at the lower speed of the PC2100 module – that is, 266MHz.

SUPERBUDGET PCs

↑ Cybyte's offering is fast, but it lacks decent sound quality and comes without an office suite

PC WorldBench 4: Superbudget PCs

(longer bars are better)   → faster

	80	90	100	110	120
PC World Advent 3810 BTO					120
Cybyte XP2000RDG				119	
Multivision Vision Elite 4200				119	
Systemax Inspire 7152				119	
Carrera SSC Octan 2100a				117	
Ideal Computing Aptus L150				115	
Mesh Matrix XP 1800+ SBPC				115	
NetHighStreet Net PA699				114	
Mesh Matrix XP 2100+ SB Pro			113		
Systemax Inspire A1700G			113		

7 Cybyte XP2000RDG

Cybyte's first foray into the Superbudget category has resulted in a seventh place for the XP2000RDG. With a WorldBench 4 score only bettered by the Advent and equalling the Best Buy Multivision, this is a fast system with decent components.
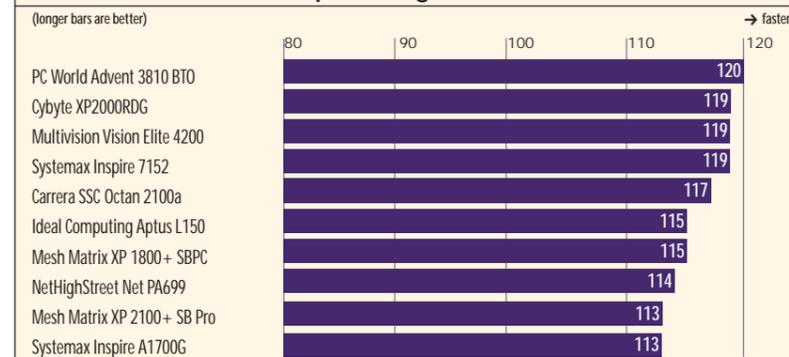
Cybyte has gone for a unique design on the XP2000RDG, opting for the stylish NEC FE770 monitor and unusual blue tower. The nVidia graphics card with 64MB of dedicated DDR (double data rate) RAM is as good as you're going to get on a Superbudget system and produced frame rates of 73fps (frames per second) at a resolution of 1,024x768 running the Quake III demo. The Cybyte doesn't rate very highly in terms of audio quality, with only an onboard sound card and a Hercules speaker system. The other thing missing is an office suite, which can be a costly extra.

8 Mesh Matrix XP 2100+ SB Pro

Despite its AMD Athlon XP 2100+ processor, the Matrix XP only managed a WorldBench 4 score of 113, the equal lowest rating in the chart. However, the standard of the Superbudget category has been very high recently – what kept this system in eighth place is simply the outstanding quality of the other entries.

The ATI Radeon 8500LE graphics card produced an impressive 73fps (frames per second) at a resolution of 1,024x768. There's also a standalone sound card, coupled with Creative Labs' Inspire 5300 speakers, which make this system a good choice if you're looking for an entertainment PC but need to keep to a tight budget.

↑ The ninth-placed Mesh Matrix houses basic components, but it's still a reasonable performer

9 Mesh Matrix XP 1800+ SBPC

The Matrix XP 1800+ SBPC sits at number nine again, despite being one of only two systems in the chart to cost £649 and managing a respectable WorldBench 4 score of 115.

The 256MB of DDR (double data rate) RAM is perfectly respectable but the 40GB Maxtor hard drive looks a little weak in comparison to the 60GB and 80GB hard drives offered by many of the new entries. However, you'll have quite a job filling 40GB of storage space so it should prove adequate. Mesh has kept this system basic in terms of components, but the three years' onsite cover go some way towards making up for this.

10 Systemax Inspire A1700G

The Systemax Inspire PC sticks at the foot of the chart this month due to the sheer quality of the opposition. The slowest processor in this chart, the Athlon XP 1700+, powers the Inspire A1700G which explains the low score of 113 in our WorldBench 4 tests. The overall hardware specification offers good value for money, despite the lowly tenth placing in the chart.

The Gainward GeForce4 graphics card performed well in our tests, knocking out 65fps (frames per second). There's also a generous amount of storage space on the 60GB hard drive and the price tag of £649 represents good value for money.

↓ The sheer quality of the Superbudget competition means that the Systemax Inspire remains at the bottom of the chart this month

↑ For an entertainment system on a budget you could do a lot worse than the Matrix XP 2100+