



BUDGET 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
1 Mesh Matrix XP 2000+ BPC 020 8208 4702 www.meshcomputers.com	1	Jun 02	118	£899	3-year onsite	AMD Athlon XP 2000+/ 1.68GHz	256MB DDR RAM	Maxtor/ 80GB	Asus A7 A266-E	M1647	56K	4
2 Multivision Vision Pro 0121 550 8000 www.multivision.co.uk	2	Jun 02	120	£999	2-year onsite	AMD Athlon XP 2000+/ 1.68GHz	512MB DDR RAM	Seagate/ 60GB	MSI 6390 LE2	Via KT266A	56K	4
3 Systemax Reliance P2260E 0870 729 7364 www.systemaxpc.co.uk	3	116	116	£999	1-year onsite, 2-year return to base	Intel Pentium 4/ 2.2GHz	256MB DDR RAM	IBM/ 80GB	MSI MS-6566E	Intel 845E	56K	4
4 Best Price Poweroid 2100 020 8904 3347 www.poweroid.com	5	Jun 02	116	£999	1-year parts and labour, 4-year labour	AMD Athlon XP 1900+/ 1.6GHz	512MB DDR RAM	Maxtor/ 80GB	Soyo K7 Dragon Plus	Via KT266A	56K	8
5 PC World Advent 3984 BTO 01442 355 802 www.pcworld.co.uk	6	Jun 02	124	£1,155	1-year onsite	AMD Athlon XP 2100+/ 1.7GHz	512MB DDR RAM	Maxtor/ 80GB	Gigabyte 7VTXE+	Via KT266A	56K	2
6 NEC PowerMate i-Select XL4 A2000+ 0870 010 6326 www.nec-online.co.uk	7	Jun 02	121	£1,049	3-year onsite	AMD Athlon XP 2000+/ 1.68GHz	512MB DDR RAM	Western Digital/ 120GB	MSI MS6367	nForce Crush12	56K	4
7 Atlas Meridian 1700+ PV05 020 8532 6120 www.higrade.com	8	May 02	116	£799	1-year onsite	AMD Athlon XP 1700+/ 1.47GHz	256MB DDR RAM	Maxtor/ 40GB	MSI nForce 420 Pro	nForce 420D	56K	2
8 Systemax A1900AD 0870 729 7364 www.systemax.co.uk	10	May 02	116	£930	1-year onsite, 2-year return to base	AMD Athlon XP 1900+/ 1.6GHz	256MB DDR RAM	IBM/ 60GB	MSI KT266	Via KT266A	56K	2
9 Multivision Vision Ultima Ti 200 0121 550 8000 www.multivision.co.uk	RE-ENTRY	Feb 02	118	£999	1-year onsite	AMD Athlon XP 1900+/ 1.6GHz	512MB DDR RAM	Seagate/ 60GB	MSI 6380LE Pro	Via KT266A	56K	6
10 Ideal Computing Ideal Apts 1800XP 0870 745 5061 www.idealcomputing.co.uk	RE-ENTRY	Feb 02	123	£1,249	1-year onsite, 2-year return to base	AMD Athlon XP 1800+/ 1.53GHz	512MB DDR RAM	IBM/ 60GB	Chaintech 7CTKJD	AMD 761	56K	2

1 Mesh Matrix XP 2000+ BPC

The well-balanced Matrix holds on to its Best Buy award for a third month thanks to a winning combination of features, warranty and a £100 price cut. Although nearly every component in this PC can be beaten by other entries in the chart, the consistent quality and all-round package offered by the Matrix XP 2000+ BPC are without equal. The Athlon XP 2000+, running at 1.68GHz, is now AMD's second-fastest processor and is twinned

↓ All-round winner for another month, the Mesh Matrix can't be beaten on specification, price or warranty



here with a sizable 80GB hard drive. Unfortunately, the system only includes 256MB of DDR (double data rate) RAM – with another 256MB the WorldBench 4 score of 118 could well have been quite a bit higher.

As an entertainment system the Matrix won't let you down. It might not have a 128MB GeForce4 graphics card but on a price-to-performance ratio ATI's 64MB Radeon LE is an easy winner, providing great visuals. It is twinned with the excellent 19in Mitsubishi Diamond Plus 92 monitor – currently the best monitor available in the Budget PC chart. Together they produce high frame rates and a beautifully crisp picture, which will be perfect for graphics-intensive applications.

Sound comes courtesy of Creative's new Inspire 5300 speakers and Audigy card. You'll also find a 16-speed DVD-ROM and a 40-/24-/10-speed (read/write/rewrite) CD-RW for backup.

As per usual, Mesh wraps this up with a useful software bundle, clear and helpful documentation and a three-year onsite warranty. All in all the Matrix XP 2000+ remains a worthy winner.

2 Multivision Vision Pro

Multivision retains second place and a Recommended award for another month with a system that's strikingly similar to Mesh's number one entry. The Vision Pro can't match the warranty on the Matrix, but nonetheless it has more than enough impressive features to push it comfortably ahead of the rest of the competition.

Except for the impressive Logitech keyboard and mouse, the Vision Pro looks plain enough at first sight, but it proved to be one of the most powerful Budget PCs we've seen. Multivision has opted for 512MB of DDR (double data rate) RAM to go with the 1.68GHz Athlon XP 2000+, and the WorldBench 4 score of 120 makes Multivision's Vision Pro the fourth-fastest in the chart. The 60GB hard drive is barely average these days but, even so, it should still prove hard to fill.

With a 64MB Radeon LE graphics card from ATI and Mitsubishi's 19in Diamond Plus 92 monitor, the visual setup is identical to our Best Buy's and renders the same impressively sharp results. Likewise, the Videologic speakers are on a par with

	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
	Mitsubishi Diamond Plus 92	19in	0.25mm	1,600x1,200	ATI Radeon 8500 LE	Radeon 8500	64MB	Creative Labs Audigy	Creative Labs Inspire 5300	5/Y	16x	40x/24x/10x	Windows XP Home, Lotus SmartSuite
	Mitsubishi Diamond Plus 92	19in	0.25mm	1,600x1,200	ATI Radeon 8500 LE	Radeon 8500	64MB	Creative Labs Audigy	Videologic ZXR 500	5/Y	16x	40x/32x/10x	Windows XP Home, Lotus SmartSuite
	CTX PR705F	17in	0.24mm	1,600x1,200	nVidia GeForce4 Ti 4200	nVidia GeForce4 Ti 4200	64MB	Creative Labs Audigy	Videologic ZXR 500	5/Y	16x	40x/24x/10x	Windows XP Home, Lotus SmartSuite
	Iiyama LS902	19in	0.26mm	1,600x1,200	ATI Radeon 8500 DV	Radeon 8500	64MB	Creative Labs 8738 Integrated	Cambridge DTT2200	5/Y	16x	40x/24x/10x	Windows XP Home, Remote control, smartcard reader
	Samsung 957 DF	19in	0.25mm	1,600x1,200	OEM-GeForce4 Ti 4400	nVidia GeForce4 Ti 4400	128MB	Creative Labs Audigy	Cambridge DTT2200	5/Y	16x	40x/24x/10x	Windows XP Home, Microsoft Works Suite 2002
	NEC HR17 MultiSync	17in	0.25mm	1,600x1,200	OEM nVidia GeForce4 Ti 4600	nVidia GeForce4 Ti 4600	128MB	Creative Labs SoundBlaster Live 5.1	Labtec LCS2541UK	4/Y	16x	40x/24x/10x	Windows XP Home, Sun Star Office 5.2, games bundle
	LG Flatron 775FT	17in	0.24mm	1,024x768	onboard	nForce onboard	32MB	onboard nForce	Cambridge DTT2200	5/Y	10x	40x/24x/10x	Windows XP Home, Microsoft Works Suite 2002
	CTX EX950F	19in	0.25mm	1,600x1,200	nVidia GeForce4 MX 440	nVidia GeForce4 MX 440	64MB	Creative Labs Audigy	Videologic ZXR-500	5/Y	16x	40x/24x/10x	Windows XP Home
	Hansol 920D	19in	0.25mm	1,600x1,200	Hercules 3D Prophet	nVidia GeForce3 Ti 200	64MB	Creative Labs SoundBlaster Live 5.1	Cambridge DTT2200	5/Y	16x	40x/24x/10x	Windows XP Home, Lotus SmartSuite, VideoWave, gamepad, webcam
	LG Flatron 775FT	17in	0.24mm	1,024x768	Hercules 3D Prophet III	nVidia GeForce3 Ti 500	64MB	Creative Labs Audigy	Cambridge DTT2200	5/Y	8x	40x/24x/10x	Windows XP Home, Star Office, remote control



↑ Very narrowly beaten to the top spot, the Multivision Vision Pro is an outstanding system

the popular Cambridge DTT2200s, and the Audigy sound card gives you the benefit not only of good audio, but also a FireWire port.

There is, however, a disappointing lack of documentation with the Vision Pro so, unless you already know what you're doing, setting up this system will require patience and a little trial and error. On the plus side, Multivision's warranty has come on in leaps and bounds since last year. It can't quite match Mesh's generous package, but it comes close with two years' onsite cover.

3 Systemax Reliance P2260E



In the performance-dominated world of Power PCs, Intel's Pentium 4 chips have for many months failed to make an impression against the sheer speed and value for money offered by AMD's Athlon range. However, in the less cutting-edge arena of the Budget PC, the 2.2GHz Pentium 4 finds itself blessed with a greater opportunity to shine.

The Systemax Reliance's WorldBench 4 score of 116 is extremely acceptable considering the mere 256MB of DDR (double data rate) RAM it has onboard. Where the Pentium 4 does have an edge is in terms of graphics performance, and the P2260E is blessed with nVidia's GeForce4 Ti 4200 card to help it along. Despite being the slowest of the new Titanium family, the 4200 performed strongly in our games tests.

Balanced throughout, there's little evidence of cost-cutting in the £999 Systemax Reliance. The IBM hard drive offers a capacious 80GB of storage space and, although the average user is unlikely to need this amount, it's much better to



↑ The well-balanced Systemax Reliance P2260E retains its Recommended award for another month

have too much storage than too little. The P2260E's sound system is also excellent, pairing Creative's Audigy card with the Videologic ZXR 500 speakers.

If we were searching for criticisms we might complain that Systemax hasn't included a 19in monitor, which would be preferable in this price range. However, when the screen in question is CTX's 17in PR705F this argument falls flat. The Systemax Reliance P2260E effectively demonstrates that you can still build an impressive PC around the Intel Pentium 4 processor.



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↑ With eight USB ports for adding peripherals, the Poweroid 2100 offers a world of possibilities

4 Best Price Poweroid 2100

The Best Price Poweroid moves up to number four this month due to the Evesham Axis 1900+ dropping out of the chart and gains itself a Recommended award in the process. The 2100 is one of the more interesting models we have had in our Test Centre and, despite a few quibbles, it's still a good system. There's an Athlon XP 1900+ processor, 512MB of DDR (double data rate) RAM and an 80GB hard drive. The WorldBench 4 score of 116 is also reasonable. ATI's 64MB Radeon 8500 DV graphics card offers TV functionality, but you need to use the bundled adapter to hook up the monitor as it only features a DVI (digital visual interface) port.

There's a generous four USB ports on the front of the Poweroid, plus two at the back. With another two on the keyboard you can connect peripherals to your heart's content. It's also bundled with a smartcard reader and a remote control.

5 PC World Advent 3984 BTO

The Advent might have earned itself a Recommended award if it hadn't been so expensive. Still, if you've got the money to spend, the 3984 BTO might just be worth it. All the specifications are top notch: an Athlon XP 2100+ running at 1.7GHz, 512MB of DDR (double data rate) RAM and an 80GB Maxtor hard drive. The Advent's WorldBench 4 score of 124 makes it the fastest Budget PC in the chart. The 3984's graphics are handled by a 128MB Geforce4 Ti 4400 card, which is more than capable of coping with high-resolution, intensive graphics. The display looked sharp on the 19in Samsung monitor, but colours are muted because of the shadow mask technology. Sound is provided by an Audigy card and Creative DTT2200 speakers. The Advent's documentation is useful and well detailed and there's a copy of Works Suite 2002, but we'd like to have seen more than two USB ports and a longer warranty.



↑ A high price keeps PC World's very decent system Advent system from winning a Recommended award



↑ Although it offers little room for expansion, the NEC is a nippy system with brilliant graphics

6 NEC PowerMate i-Select XL4 A2000+

The NEC moves up to sixth place but remains in the bottom half of the chart despite a £150 price cut. However, the PowerMate i-Select XL4 A2000+ is by no means a bad buy. There are better bargains available, but if you want the best graphics and storage the NEC is a good choice. With a vast Western Digital 120GB hard drive, an Athlon XP 2000+ processor and 512MB of DDR (double data rate) RAM, the NEC PowerMate i-Select achieved an impressive WorldBench 4 score of 121.

Audio is disappointing with four Labtec satellite speakers plus subwoofer, and the SoundBlaster Live 5.1 is past its sell-by date. Graphically, though, the i-Select is stunning thanks to the GeForce4 Ti 4600. You're out of luck if you want to add any extra PCI cards because there are no slots left on the motherboard, but the PowerMate has some redeeming features – the documentation, software and warranty are good.

Memory types

Anyone who knows the basics about PCs knows that RAM, or random access memory, is where your computer stores current applications and data. However, as the technology develops there are more and more different types of RAM finding their way on to the PC motherboard.

The most common type of RAM found in the PCs across all our charts is DDR RAM, otherwise known as double data rate memory. This is an enhancement on the older, slower SDRAM, still found on a couple of our Superbudget PCs. SDRAM stands for Synchronous DRAM, itself a speeded up version of dynamic RAM, which is able to synchronise its speed with that of the processor.

DDR RAM was first found on graphics cards, but has made the transition to the main board within the PC. As its name suggests, this type of memory effectively doubles the memory chip's data throughput, offering much speedier performance.

In the past Intel has favoured RDRAM, or Rambus DRAM, though thanks to the higher cost of this memory it has not proved that popular among customers. This is the fastest current memory technology, offering speeds of up to 800MHz, whereas DDR RAM can only reach 333MHz. But because of the high cost of RDRAM even Intel is now shifting to DDR RAM, and has recently introduced a Pentium 4 motherboard that will support this type of memory.



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↑ The Atlas Meridian's sound and graphics are exemplary, though it was slightly slow on performance

7 Atlas Meridian 1700+ PV05

The Atlas Meridian's Athlon XP 1700+ processor isn't the fastest available, but the reasonable WorldBench 4 score of 116 shows it can keep up with the competitors. You'll find 256MB of DDR (double data rate) memory inside, plus a Maxtor 40GB hard drive, which is the bare minimum.

While the Meridian 1700+ PV05 won't give you top-of-the-range all-round performance, its onboard video is more than sufficient for gamers, thanks to nVidia's impressive nForce chipset. Similarly, the onboard sound offers 5.1 support, so you can make full use of the impressive Creative DTT2200 surround speaker set.

The Meridian's 17in LG 775FT monitor offers a crisp 0.24mm dot pitch with a maximum resolution of 1,024x768 at 75Hz. You can push it up to 1,280x1,024, although you have to drop down to 60Hz. Atlas has even thrown in a TV card, Logitech Cordless keyboard and mouse, along with a copy of Microsoft Works Suite 2002.



↑ At the lower end of the price range, the Systemax is one for the bargain hunters

PC WorldBench 4: Budget PCs

(longer bars are better)

	25	50	75	100	125
PC World Advent 3984 BT0					124
Ideal Computing Ideal Aptus 1800XP					123
NEC PowerMate i-Select XL A2000+					121
Multivision Vision Pro					120
Multivision Vision Ultima Ti 200					118
Mesh Matrix XP 2000+ BPC					118
Atlas Meridian 1700+ PV05					116
Best Price Poweroid 2100					116
Systemax A1900AD					116
Systemax Reliance P2260E					116

8 Systemax A1900AD

Shifting up two spots in August's chart, owing to the discontinuation of Mesh's Matrix XP 1800 Ti and the Evesham Axis 1900+ dropping out of the chart, is this machine from Systemax. The A1900AD is equipped with 256MB of DDR (double data rate) RAM and a 1.6GHz AMD Athlon 1900+ processor, racking up a WorldBench 4 score of 116 which puts it on a par with its third-placed sibling.

Crystal clear audio is delivered by a Creative SoundBlaster Audigy sound card through a set of Videologic ZXR-500 speakers. The GeForce4 MX 440 graphics card is designed with the budget user in mind – it can't compete with the higher-end cards, but it still offers decent frame rates and good value for money. Graphics are displayed on a colourful 19in CTX EX950F monitor, but the clarity was lacking. Systemax wraps the package up with a one-year onsite, two-year return-to base warranty.

9 Multivision Vision Ultima Ti 200

High-end specifications and value for money see this former Recommended system re-entering our chart. With an AMD Athlon XP 1900+ processor, 512MB of DDR (double data rate) RAM and 60GB hard drive the Vision Ultima Ti 200 achieved a creditable WorldBench 4 score of 118. Sound is taken care of by a Creative SoundBlaster Live 5.1 card and DTT2200 speakers, and graphics come courtesy of a 64MB GeForce3 Ti 200 Hercules graphics card and 19in monitor.



↑ The Multivision lacks documentation, but its extras – such as the webcam – help make up for this shortfall

10 Ideal Computing Ideal Aptus 1800XP

Due to the Evesham dropping out, the Ideal Aptus re-enters the chart at number 10. Ideal Computing has combined a 1.53GHz Athlon XP 1800+ with 512MB of DDR (double data rate) RAM and a 60GB hard drive, rendering the second-fastest WorldBench 4 score of 123. Graphically, though, the Aptus isn't brilliant. Its GeForce3 Ti 500 chip is excellent, but it isn't matched by the LG monitor which only reaches 1,280x1,024 and is hampered by a low refresh rate.



↑ Ideal Computing's Aptus 1800XP is a speedy system but its graphics setup lets it down