


**SUPERBUDGET PCs**

Details	Last month's position	First reviewed	PC World-Bench	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
<b>1</b> Mesh Matrix XP 1800+ SBPC 020 8208 4702 www.meshcomputers.com	1	Jul 02	115	£699	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 GeForce2 MX 440	64MB	onboard	Creative FPS1600	4/Y	16x	48x/40x/12x	Windows XP Home, Lotus SmartSuite
<b>2</b> CCL Computers Home XPK2 01274 471 267 www.cclcomputers.co.uk	2	Jul 02	117	£699	1-year collect and return, 2-year labour	AMD Athlon XP 2000+/1.68GHz	256MB DDR RAM	Maxtor/40GB	Soltek SL75-DRV4	Via KT266A	56K	2	CTX EX710F	17in	0.25mm	1,600x1,200	XFx GeForce4 MX 440	nVidia GeForce4 MX 440	64MB	onboard	Genius SP-G16	2/N	12x	40x/32x/12x	Windows XP Home
<b>3</b> Systemax Inspire A1700G 0870 729 7364 www.systemaxpc.co.uk	3	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 GeForce2 MX 420	nVidia GeForce4 MX 420	64MB	onboard	Systemax CA4400	4/Y	16x	40x/32x/10x	Windows XP Home, Lotus SmartSuite
<b>4</b> Ideal Computing Aptus L20-XP+ 0870 745 5061 www.idealcomputing.co.uk	4	May 02	116	£699	1-year onsite 2-year return to base	AMD Athlon XP 1700+/1.47GHz	256MB DDR RAM	IBM/40GB	Chaintech 7VJDA	Via KT266A	56K	2	CTX EX710F	17in	0.25mm	1,600x1,200	Gainward GeForce2 Ti 450	nVidia GeForce2 Ti 450	64MB	onboard	Nisis S5 4.1	4/Y	16x	40x/16x/12x	Windows XP Home, Star Office
<b>5</b> Systemax Inspire 7012 0870 7297 364 www.systemaxpc.co.uk	<b>NEW</b>	Sept 02	98	£599	1-year parts and labour, 2-year labour	AMD Duron/1.3GHz	256MB DDR RAM	IBM/40GB	MSI K7T266	Via KT266A	56K	6	CTX VL700	17in	0.27mm	1,280x1,024	Gainward GeForce4 MX 420	nVidia GeForce4 MX 421	64MB	onboard	Cyber Acoustics CA-3080	2/Y	16x	40x/24x/10x	Windows XP Home, Lotus SmartSuite
<b>6</b> NetHighStreet.com Net PA699 0870 777 5252 www.nethighstreet.com	5	Jul 02	116	£699	1-year return to base	AMD Athlon XP 1900+/1.6GHz	256MB DDR RAM	Maxtor/40GB	Asus A7V333	Via KT333	56K	6	Hansol 720E	17in	0.27mm	1,024x768	Gainward GeForce3 Ti 200	nVidia GeForce3 Ti 200	128MB	onboard	Creative FPS1600	4/Y	16x	40x/24x/10x	Windows XP Home
<b>7</b> Multivision Vision Elite 420 0121 550 8000 www.multivision.co.uk	6	Jun 02	116	£699	1-year onsite	AMD Athlon XP 1800+/1.53GHz	256MB DDR RAM	Seagate/60GB	DFI AD 70 SC	Via KT266A	56K	4	NEC/Mitsubishi MS 75F	17in	0.25mm	1,024x768	nVidia GeForce4 MX 420	nVidia GeForce4 MX 420	64MB	Creative Labs Live 5.1	Videologic ZXR 500	5/Y	16x	40x/32x/10x	Windows XP Home, Lotus SmartSuite
<b>8</b> CCL Computers Home XP202 01274 471 267 www.cclcomputers.co.uk	7	May 02	118	£699	1-year collect and return, 2-year return to base	AMD Athlon XP 1700+/1.47GHz	256MB DDR RAM	Maxtor/40GB	Soltek SL75-DRV4	Via KT266A	56K	2	CTX EX710F	17in	0.25mm	1,600x1,200	WinFast GeForce2 Ti 200	nVidia GeForce2 Ti 200	64MB	onboard	Genius 200W	2/N	16x	40x/24x/10x	Windows XP Home, Microsoft Works 2001
<b>9</b> Easy PC Direct E1800X 0800 195 4353 www.easypcdirect.co.uk	8	Jul 02	112	£699	3-year return to base	AMD Athlon XP 1800+/1.53GHz	256MB RAM	Seagate/40GB	Jetway	Via KT266	56K	2	Relisys TF770	17in	0.25mm	1,280x1,024	Gainward GeForce4 MX 440	nVidia GeForce4 MX 440	64MB	onboard	Mercury SW 880	2/Y	16x	48x/32x/12x	Windows XP Home, PC-cillin Encyclopaedia Britannica Lotus SmartSuite
<b>10</b> Wisdom Computers Silver Bullet 0870 050 2299 www.wisdom-computers.com	9	Jul 02	94	£699	1-year onsite, 4-year labour	AMD Duron/1GHz	256MB DDR RAM	Maxtor/40GB	ECS 55A	Sis 735	56K	4	AOC 7VLR	17in	0.27mm	1,024x768	Mentor GeForce4 MX 400	nVidia GeForce4 MX 400	64MB	Creative Labs Live 5.1	Creative Inspire 5300	5/Y	16x	40x/24x/10x	Windows XP Home, SmartSuite Millennium


**1** Mesh Matrix XP 1800+ SBPC

The superb Matrix XP 1800+ SBPC from relatively new Superbudget PC entrant Mesh manages to hold on to its position at the head of the Superbudget chart for the third month running. Mesh has chosen the AMD route, packing in an Athlon XP 1800+ processor running at 1.53GHz. Coupled with 256MB of DDR (double data rate) RAM it racked up a WorldBench 4 score of 115 – not the fastest, but not far off. For a limited time only, Mesh is offering a free upgrade to the XP 2000+ processor which should improve the WorldBench score.

← The Mesh runs into its third month at the top due to its all-round decent spec and generous warranty

The Maxtor hard drive is a 40GB model, and there's a 48-/40-/12-speed (read/write/rewrite) Teac CD-RW for backup and a 16-speed Pioneer DVD-ROM. Sound comes from the onboard Cmedia audio chip which, while integrated, can still support six channels for surround sound. Unfortunately this isn't exploited by the Creative FPS1600 speaker set, which only runs to four satellites and a subwoofer.

The graphics are taken care of by nVidia's GeForce4 MX 440 chip, which is a budget option but impressive all the same. Running through the Annihilator demo in Quake III resulted in a frame rate of 69.1fps (frames per second) at 1,024x768 resolution. The 17in monitor produces a good, solid display but is let down by its maximum resolution setting of 1,280x960, rather than the more usual 1,280x1,024. Unfortunately, in the Superbudget category compromises have to be made. Thankfully, Mesh hasn't skimped on the warranty, topping off the package with a three-year onsite deal.

**2** CCL Computers Home XPK2

Opting for AMD's third-fastest processor, the 1.68GHz Athlon XP 2000+, continues to prove a winning choice for CCL Computers as the Home XPK2 retains second place and a Recommended award. Supported by 256MB of DDR (double data rate) RAM, this CCL system achieved a WorldBench 4 score of 117. The Home XPK2's 40GB of storage courtesy of Maxtor's hard drive doesn't disappoint either. Optical honours are taken care of by a 12-speed DVD-ROM and a 40-/32-/12-speed (read/write/rewrite) CD-RW.

Like the Best Buy Mesh Matrix, CCL has opted for the GeForce4 MX 440 graphics chip, allowing the Home XPK2 to produce 67fps (frames per second) running the Annihilator Quake III demo at 1,024x768. The EX710F monitor from CTX provides a truly vivid display and even stretches to a resolution of 1,600x1,200, although some may find icons too small at that setting on a 17in display. To keep the cost down, sound comes from an onboard solution and the speakers only run to two desktop units.



↑ CCL Computers' system is one of the fastest PCs in the chart, with a speedy WorldBench score of 117

The package isn't as generous as Mesh's on the support side, with the warranty offering just one-year collect-and-return followed by two years cover for labour only.

CCL Computers has put together a good system, and offers one of the fastest systems in the chart this month. However, the Home XPK2 is not dramatically faster than the competition and ultimately the difference isn't going to be that noticeable in everyday use. This PC is a competent runner-up, but could have benefitted from a more generous warranty.

**3** Systemax Inspire A1700G

Weighing up the price/performance issue, Systemax has chosen AMD's 1700+ chip running at 1.47GHz, which managed a WorldBench 4 score of 113. There's the standard 256MB of DDR (double data rate) RAM, but Systemax has pushed the boat out when it comes to storage, bundling a 60GB IBM hard drive.

The 40-/32-/10-speed (read/write/rewrite) Systemax CD-RW is fairly standard, as is the own-brand 16-speed DVD-ROM. Like the Mesh Matrix, the onboard audio chip is capable of providing six-channel sound, although you won't get the full benefit from the Systemax CA4400 speaker setup as it only includes four satellites and a subwoofer.

The CTX EX700F monitor generates the same quality of display provided by the EX710F bundled with the CCL system, but it can't quite offer the same resolution support, topping out at 1,280x1,024. The Gainward GeForce4 graphics card uses the nVidia MX 420 chip, managing 65.1fps (frames per second) with the Quake III Annihilator demo.



↑ The Systemax Inspire A1700G is one of two Superbudget systems that offer a 60GB hard drive

Two of the Inspire's USB ports have been thoughtfully front-mounted – a handy option, especially if you frequently need to plug and unplug different devices like digital cameras or external drives. There's also a bundled copy of Lotus SmartSuite to get you going.

The Systemax's warranty is unfortunately a little lacking, stretching to just one-year collect-and-return followed by a further two years covering labour only. But ultimately the Inspire remains a worthy Recommended contender, pipped at the post by the competition.

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↑ Ideal Computing manages to stick at number four this month with its Aptus L20-XP+

 **4** Ideal Computing Aptus L20-XP+

Ideal Computing's former Best Buy manages to hang in at number four for another month, claiming the final Recommended award. The 1.47GHz AMD 1700+ Athlon XP processor is well complemented by 256MB of DDR (double data rate) RAM and an adequate 40GB hard drive, achieving a WorldBench 4 score of 116.

The 17in CTX EX710F monitor remains one of the best shadow mask displays on the market, with a Gainward 64MB GeForce2 Ti 450 card ensuring top-quality graphics. Likewise, the Cmedia audio chip is better than the typical AC97 codec on motherboards and the Nisis S5 4.1 speakers provide good playback.

We also praise Ideal Computing for putting in a CD-RW drive – something that was sorely missed on the Aptus 1600XP, reviewed in February 02. The warranty is a reasonable one-year onsite, two-year return-to-base.

 **5** Systemax Inspire 7012

Not only does the Inspire 7012 strike a happy balance between features and specifications, it also comes in over £100 cheaper than all the other models in our chart. AMD's budget Duron processor rarely makes an appearance in our charts any more and this 1.3GHz model won't give the performance of an Athlon chip. That said, its WorldBench 4 score of 98 still equates to a reasonable performance.

Backing up the processor is a 40GB hard drive and 256MB of DDR (double data rate) RAM. Two spare Dimm slots mean that there's plenty of room for upgrading. nVidia's GeForce4 MX 420 caters for the graphics sub-system and, though it's a budget card, it still packs plenty of power. The Inspire doesn't have some of the trimmings sported by other entrants but it can't be beaten for value. Despite a lower spec, it's respectably fast and a sensible option for the first-time buyer.

↓ Our only new entry this month is the Inspire 7012 – a sensible choice for the first-time buyer



↑ Slipping to number six due to the new entry from Systemax is the NetHighStreet.com Net PA699

 **6** NetHighStreet.com Net PA699

Dropping one place to number six this month is NetHighStreet's Net PA699. With a 1.6GHz AMD Athlon XP 1900+ coupled with 256MB of DDR (double data rate) RAM, it got a WorldBench 4 result of 116. Rather than opt for nVidia's latest graphics card, NetHighStreet went for a GeForce3 Ti200-based card, which gave 64.4fps (frames per second) at 1,024x768 running the Annihilator demo in Quake III.

The curvy 17in Hansol 720E monitor does the job, but it's not the best. Sound comes from a six-channel onboard chip, but again you won't get the full effect from the four speakers and subwoofer in the Creative FPS1600 setup. The warranty unfortunately only runs to a pitiful one-year return-to-base cover.

The Net PA699 system we saw suffered from overheating problems during testing. However, NetHighStreet assured us that production units would include a case fan to alleviate the problem.

## DDR 400: the lowdown

**A**cross our PCs charts DDR (double data rate) memory rules the roost, as few manufacturers want to bundle the slower and increasingly redundant SDR (single data rate) RAM. However, as with SDR, some DDR RAM is more equal than others.

The chipset on your motherboard dictates the memory bus speed – a faster memory bus equates to better performance. In order to get the benefit you need to use memory that can keep up with the bus speed offered by the chipset. It's no good just getting the fastest memory available if the chipset on your motherboard doesn't support it as it won't result in increased performance. For optimal performance the chipset and memory should be the same speed.

DDR memory started at speeds of 200MHz (that is, two times 100MHz) and the fastest we've seen in our Test Centre is 333MHz. However, there's a new kid on the memory block. Kingmax was quick to support DDR 333 products and now it's offering DDR 400 (running at 400MHz) memory modules. Other manufacturers will be sure to follow suit and it won't be long before we see chipsets appearing that support this speed.

Although no chipset officially supports 400MHz at the moment, some motherboard manufacturers are pushing current technology to its limits by overclocking 333MHz chipsets to 400MHz.

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↑ Impressive when it first entered our chart back in June, the Vision Elite 420 remains a competent PC

 **7** Multivision Vision Elite 420

The Vision Elite 420 offered great base specifications and broke a few Superbudget barriers in its time, but now we see it relegated a further place this month to seventh. While it isn't the fastest Superbudget PC in the chart, the Multivision's WorldBench 4 score of 116 reflects its high-end specifications. AMD's Athlon XP 1800+ processor is a quick runner at 1.53GHz and this is aided by 256MB of DDR (double data rate) RAM and a vast 60GB hard drive.

Backup is provided by a fast 40-/32-/10-speed (read/write/rewrite) CD-RW drive. Videologic ZXR 500 speakers and a SoundBlaster Live 5.1 card are up to scratch, and the GeForce4 MX 420 card supplies the 17in NEC/Mitsubishi MS 75F screen which, though fair, has limited resolution support.

 **8** CCL Computers Home XP202

Dropping to number eight, due to the new fifth-placed entry from Systemax, is CCL's Home XP202. The 1.47GHz processor, combined with 256MB of DDR (double data rate) RAM helped the system achieve a WorldBench 4 score of 118 – the fastest in the chart – and storage is provided by a 40GB Maxtor hard drive.

The CTX EX710F monitor offers a pin-sharp resolution of 1,600x1,200 at 75Hz, plus there's a WinFast 64MB GeForce2 Ti 200 graphics card. The audio hardware, however, is disappointing. There are only two Genius speakers with no subwoofer to beef up the all-important bass, and the onboard sound is bottom of the range.

## PC WorldBench 4: Superbudget PCs



↑ CCL Computer's Home XP202 entry is the speediest Superbudget system with a WorldBench score of 118

 **9** Easy PC Direct E1800X

The E1800X features a 1.53GHz Athlon XP 1800+ processor, 40GB Seagate hard drive and 256MB RAM which combined to achieve a WorldBench 4 score of 112. Graphics are courtesy of a GeForce4 MX 440-based card hooked up to a fair 17in Relisys TF770 monitor. The onboard sound is combined with a set of Mercury SW880 speakers, offering two satellites and a subwoofer. However, the E1800X's small, cramped case means that this PC is a bad



↑ The Direct E1800X from Easy PC will prove difficult to upgrade due to its small, cramped case

choice if you're keen on upgrading. Worse still, we found the power supply on the review system hadn't been attached properly and fell into the case on setup. Easy PC has assured us this was an isolated incident and won't occur on shipping units.

 **10** Wisdom Computers Silver Bullet

The Silver Bullet has the type of styling that you'll either love or hate. Inside there's an AMD Duron chip running at 1GHz which, unable to match the performance of the Athlons, only managed a WorldBench 4 score of 94 with 256MB of DDR (double data rate) RAM. Storage runs to 40GB and the requisite DVD-ROM and CD-RW are also installed. The 17in AOC monitor, though noticeably curvy, is backed up by a GeForce4 MX 400 graphics card. Sound is well catered for by Creative's Live 5.1 card and a set of excellent Creative 5300 Inspire speakers.

↓ Hanging on at number 10 this month is Wisdom Computers' Silver Bullet – an unusual looking system with the slowest WorldBench score in the chart



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