





TOP 10 POWER 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	Office suite & other extras
 1 Mesh Matrix 1900 TI5X 020 8208 4702 www.meshcomputers.com	NEW	Feb 02	121 (WB 4)	£1,299	3-year onsite parts and labour	AMD Athlon XP 1900+/1.6GHz	512MB DDR RAM	Maxtor/80GB	Asus A7M266-E	Ali-Magik	56K	4		Mitsubishi DPRO 920	19in	0.24mm	1,600x1,200	nVidia GeForce3 Ti 500	nVidia GeForce3 Ti 500	64MB	Creative Audigy	Creative DTT2200	5/Y	24x	32x/24x/10x	Windows XP Home, Microsoft Works Suite 2001
 2 Systemax A1900Fz Pro 0870 729 7364 www.systemaxpc.co.uk	NEW	Feb 02	117 (WB 4)	£1,249	1-year onsite 2-year return to base	AMD Athlon XP 1900+/1.6GHz	256MB DDR RAM	IBM/60GB	MSI	Via KT266A	56K	2		CTX PR960F	18in	0.24mm	1,600x1,200	Gainward GeForce3 Ti 500	nVidia GeForce3 Ti 500	64MB	Creative Audigy	Creative DTT2200	5/Y	16x	32x/16x/10x	Windows XP Home, games bundle, TV tuner
 3 Mesh Matrix XP 1900-R85 020 8208 4702 www.meshcomputers.com	1	Jan 02	259 (WB 2000)	£1,399	3-year onsite	AMD Athlon XP 1900+/1.6GHz	1,024MB DDR RAM	Maxtor/80GB	Asus A7M266	Via KT233	56K	4		Mitsubishi DPRO 920	19in	0.24mm	1,600x1,200	ATI Radeon 8500	ATI Radeon 8500	64MB	Creative Audigy	Creative DTT2200	5/Y	16x	40x/24x/10x	Windows 2000, Microsoft Works Suite 2001 Nero, PowerDVD
 4 Advent 3969SP 0870 546 4464 www.pcworld.co.uk	NEW	Feb 02	120 (WB 4)	£1,216	1-year onsite, 2-year return to base	AMD Athlon XP 1900+/1.6GHz	512MB DDR RAM	Maxtor/80GB	Gigabyte GA-7DX	Irongate 4 761	56K	2		Samsung 957DFT+	19in	0.25mm	1,600x1,200	Leadtek GeForce3 Ti 500	nVidia GeForce3 Ti 500	64MB	Creative Labs Live 5.1	Creative DTT2200	5/Y	16x	32x/16x/10x	Windows XP Home, Microsoft Works Suite 2001
5 Evesham Axis 1900+ Ti5 0800 038 0800 www.evesham.com	NEW	Feb 02	124 (WB 4)	£1,599	2-year onsite, 1-year parts and labour	AMD Athlon/XP 1900+/1.6GHz	512MB DDR RAM	Western Digital/100GB	Asus A7M266-E	Via KT266A	56K	4		Samsung SM170T	17in flat-panel	0.26mm	1,280x1,024	nVidia GeForce3 Ti 500	nVidia GeForce3 Ti 500	64MB	Creative Audigy	Creative DTT2200	5/Y	16x	40x/24x/10x	Windows XP Home, Star Office
6 Atlas Meridian XP19PV01 020 8532 6100 www.systemaxpc.co.uk	NEW	Feb 02	121 (WB 4)	£1,499	1-year onsite, 2-year return to base	AMD Athlon/XP 1900+/1.6GHz	512MB DDR RAM	Maxtor/80GB	Asus A7M266-E	SIS	56K	2		LG Flatron 915F	19in	0.24mm	1,600x1,200	Gainward GeForce3 Ti 500	nVidia GeForce3 Ti 500	64MB	Creative Labs Live 5.1	Creative DTT2200	5/Y	16x	40x/16x/10x	Windows XP Pro, Lotus SmartSuite Millennium, McAfee AntiVirus
7 NEC Powermate Select XL3 A1900+ 0870 010 6326 www.nec-online.ci.uk	NEW	Feb 02	109 (WB 4)	£1,599	3-year onsite	AMD Athlon/XP 1900+/1.6GHz	512MB DDR RAM	Seagate/80GB	Gigabyte GA-7DX	AMD 760	56K	2		NEC Multisync HR19	19in	0.25mm	1,600x1,200	Leadtek GeForce3	nVidia GeForce3	64MB	Creative Labs Live 1024	Creative DTT2200	5/Y	16x	24x/8x/4x (DVD-RW)	Windows 98 SE
8 Hi-Grade Meridian XP1.8G PA 020 8532 6100 www.higrade.com	2	Dec 01	255 (WB 2000)	£1,439	2-year onsite, 1-year return to base	AMD Athlon XP 1800+/1.53GHz	512MB DDR RAM	Western Digital/60GB	Asus A7M266	AMD 760	56K	4		LG Flatron 915F	19in	0.24mm	1,600x1,200	nVidia GeForce3 Ti 500	nVidia GeForce Ti 500	64MB	onboard	Creative DTT2200	5/Y	16x	40x/16x/10x	Windows 2000 Pro, Microsoft Works Suite 2001
9 Panrix Titan XK-1900 0113 244 4958 www.panrix.com	NEW	Feb 02	114 (WB 4)	£1,599	1-year onsite, 2-year return to base	AMD Athlon XP 1900+/1.6GHzv	512MB DDR RAM	Western Digital/100GB	Microstar MS-6380	Via KT266A	56K	6		Mitsubishi DPRO 920	19in	0.24mm	1,600x1,200	ATI Radeon 8500	ATI Radeon 8500	64MB	Creative Labs Live 5.1	Creative DTT2200	5/Y	16x	40x/24x/10x	Windows XP Home, Microsoft Works Suite 2001
10 Evesham Axis 1800+ Ti5 0800 038 0800 www.evesham.com	3	Dec 01	244 (WB 2000)	£1,649	2-year onsite, 1-year parts and labour	AMD Athlon XP 1800+/1.53GHz	512MB DDR RAM	Western Digital/100GB	Gigabyte GA-7DX	AMD 760	56K	4		Samsung 170T	17in	0.26mm	1,280x1,024	nVidia GeForce3 Ti 500	nVidia GeForce Ti 500	64MB	Creative Audigy	Creative DTT2200	5/Y	16x	32x/16x/10x	Windows 2000, Star Office

1 Mesh Matrix 1900 TI5X



This month sees not only seven new entries, but a new version of WorldBench – our in-house benchmarking software. As version 4 uses a different base PC than WorldBench 2000 to generate its scores, results from the two tests are not comparable, so although



systems tested with the previous version seem to have higher scores they are not necessarily faster.

Mesh may have been the first to use AMD's new Athlon XP 1900+ last month, but the competition has now caught up – all the new entries this month are trying their hand with the latest processor. Despite this, Mesh has managed to hold the top of the chart with the Matrix 1900 TI5X, scoring 121 in WorldBench 4.

There's more to the Mesh than just a fast processor, though. Inside you'll find 512MB of DDR (double data rate) RAM and an 80GB Maxtor hard drive. It's unlikely you'll ever need such large amounts of storage, but it sets you

← The Best Buy Mesh Matrix 1900 TI5X is a high-performing, value-for-money system

in good stead for the future. The Diamond Pro 920 monitor produces a good display and nVidia's latest graphics chip, the GeForce3 Titanium 500, provides top quality performance. Mesh has chosen Creative's Audigy sound card, which provides top-notch audio and equips you with a FireWire port for fast data transfer.

All in all, the Mesh Matrix 1900 TI5X provides performance, features and value for money, coming in just £99 over the £1,200 category boundary.

2 Systemax A1900FZ Pro



Hot on the heels of Mesh is the A1900FZ Pro from Systemax. This Recommended system uses the same Athlon XP 1900+ chip, but only managed to squeeze 117 points out of it in WorldBench 4. Although the Systemax offers 256MB of DDR (double data rate)



↑ With six games to test the GeForce3 Titanium 500 graphics chip, the A1900FZ is a great setup for gamers

RAM, compared to some other systems with 512MB, it's unlikely that you'll see that much difference unless you're running lots of applications simultaneously. Similarly, you'd be hard pushed to fill the 60GB hard drive unless you were doing

some serious video-editing. The inclusion of a GeForce3 Titanium 500 graphics card will please gamers, as will the six bundled games. Combined with the CTX PR960F monitor, this produces a superb display.

Creative's new Audigy features hook up well with the surround DTT2200 speakers. For backup there's a 32-/16-/10-speed (read/write/rewrite) CD-RW. Topping off the multimedia capabilities are a 16-speed DVD-ROM and an ATI TV card, so you can watch television on your PC.

The Systemax A1900FZ Pro may be £50 cheaper than the Mesh, but the Matrix just had the edge, leaving Systemax in second place.

3 Mesh Matrix XP 1900–R85



Last month's number one finds itself relegated to third place already, pushed out by one of its

own kind. The R85 is a tidy, well presented PC with ample documentation, but it's what's under the hood that makes it stand out. At its heart the Athlon XP 1900+ processor is backed up by a huge 1,024MB of DDR (double data rate) RAM and an 80GB hard drive. This secures the



↑ The Mesh Matrix XP has been pushed out of the top spot, but is still a very good contender

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Matrix XP the highest WorldBench 2000 score of 259. However, we should mention that the R85 will ship with XP Home, rather than Windows 2000 as we used, which may slow its performance down.

Potential buyers are spoilt by the audio visual experience. ATI's 64MB Radeon 8500 equals the GeForce3 and the Mitsubishi monitor complements it well. We were impressed by the new Audigy card, while the DTT2200 speakers offer superb cinema sound.

To be picky, a copy of Works Suite 2001 isn't the most generous software bundle. However, a three-year onsite warranty more than makes up for this.

4 PC World Advent 3969SP

After a long absence, PC World returns to the Power PCs
 Top 10, picking up the final Recommended award for its Advent 3969SP machine. The Athlon XP 1900+ and 512MB of DDR (double data rate) RAM combine to produce a WorldBench 4 score of 120. There's a huge 80GB of storage on offer from the Maxtor drive, which is more than enough for all but the most demanding users.



The third entry to utilise nVidia's latest graphics chip, the GeForce3 Titanium 500, the PC World Advent will keep gamers happy. The 19in Samsung 957DF monitor is not as good as the CTX model seen on the Systemax, but it's still a solid performer.

Toshiba provides the 16-speed DVD-ROM drive, and there's also a 32-/16-/10-speed (read/write/rewrite) Samsung CD-RW for backup. Rather than opting for the new Audigy, PC World has instead chosen its predecessor – the Live 5.1, which doesn't have the option of FireWire.

The Advent 3969SP is the cheapest new entry, but this does show in some of the components – and the warranty only stretches to one-year onsite.

5 Evesham Axis 1900+ Ti5

Evesham claims the highest score in our WorldBench 4 benchmark with 124, but it isn't enough to move the Axis higher up the chart. There's a healthy 512MB of DDR (double data rate) RAM and a 100GB hard drive – more than most users could ever hope to fill.

Ditching the traditional CRT (cathode ray tube) monitor in favour of a Samsung flat-panel benefits those with limited desk space. It only offers a maximum resolution of 1,280x1,024, but the combination DVI (digital video interface) and GeForce3 Titanium 500-based graphics card guarantees a rock-solid image. Overall, the Axis 1900+ Ti5 is an excellent package – but the £1,599 price tag stops it featuring further up the chart.

← PC World enters our chart at number four, with its powerful but cheap system, the Advent 3969SP



↑ The Evesham Axis 1900+ Ti5 achieved the highest WorldBench 4 score in the Top 10 chart

6 Atlas Meridian XP19PV01

Atlas's new entry this month, like the Best Buy from Mesh, uses AMD's latest processor coupled with 512MB of DDR (double data rate) RAM, and produces a WorldBench 4 score of 121. Atlas has also opted for the same motherboard as Mesh – Asus' A7A266-E, which supports both SDR (single data rate) and DDR RAM, although not both at the same time.

Inside, there's an 80GB hard drive from Maxtor, 40-/16-/10-speed (read/write/rewrite) LG CD-RW and 16-speed LG DVD-ROM drive. The inclusion of a 64MB GeForce3 Titanium 500 graphics card will

↓ The Atlas houses many of the same components as the Best Buy Mesh, but fails to sit higher up the chart



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please gamers, as will the 19in LG Flatron 915 FT monitor. On the peripherals front, Atlas has chosen a Logitech cordless keyboard and mouse, which is a nice addition, and a TV card, so you can watch your favourite programmes on your PC.

↓ The NEC Powermate uses the ageing Creative Live 1024 sound card, so there's no FireWire option



7 NEC Powermate Select XL3 A1900+

NEC has to settle for seventh place with the Select XL3 A1900+. Built around an Athlon XP 1900+ processor and 512MB of DDR (double data rate) RAM, the Powermate Select managed a WorldBench 4 score of 109.

Like all of the new Power entries, there's more than enough storage available thanks to an 80GB Seagate hard drive. While other manufacturers are packing in ever-more expansive hard drives, NEC has saved a thought for backup with the inclusion of a Pioneer DVR-A03 drive, making it the only Power PC that can write DVDs as well as CDs.

The 19in NEC MultiSync HR19 monitor produces a solid display, and is adequately backed up by a GeForce3-based graphics card. The Creative Live 1024 sound card is getting a little old now, and it doesn't offer the advantages of FireWire that the Audigy does. However, if you're not fanatical about your sound system, it's more than adequate.

8 Hi-Grade Meridian XP1.8G PA

Hi-Grade manages to hang in at number eight with the Meridian XP1.8G PA, which achieved a WorldBench 2000 score of 255. The Meridian backs its Athlon XP 1800+ chip with 512MB of DDR (double data rate) RAM, nVidia's 64MB Titanium

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↑ Slipping six places to number eight is the Hi-Grade Meridian XP1.8G PA

graphics card and a 60GB Western Digital hard drive. Hi-Grade completes the package with a range of high-quality peripherals, including a 19in LG Flatron 915FT monitor, wireless keyboard and mouse from Logitech, 16-speed DVD-ROM and 40-/16-/10-speed (read/write/rewrite) CD-RW drive.

9 Panrix Titan XK-1900

Panrix enters the chart in ninth place with the Titan XK-1900. Again, we see

↓ Our final new entry is the Panrix Titan, which achieved a WorldBench 4 score of 114



AMD's 1900+ XP processor supported by a healthy 512MB of DDR (double data rate) RAM, resulting in a WorldBench 4 score of 114. A massive 100GB of storage is on offer from the Western Digital hard disk and the ubiquitous DVD-ROM/CD-RW combo drive, running at 16-speed and 40-/24-/10-speed (read/write/rewrite) respectively, are supplied by LG.

10 Evesham Axis 1800+ Ti5

Just surviving at number 10 is Evesham's Axis 1800+ Ti5, which matches the Hi-Grade Meridian for both processor and RAM. If you need a lot of storage, you'll welcome the 100GB hard drive. There's also a 32-/16-/10-speed (read/write/rewrite) CD-RW and a 16-speed DVD-ROM. The best thing about the Axis is its 17in digital flat-panel display, which is combined with a 64MB Titanium graphics card.

↓ Hanging on at the bottom of the chart is the Evesham Axis 1800+ Ti5



→ Turn the page to see what's happening in the Top 10 Budget PC chart

Motherboards

When it comes to buying a brand-new PC, there's little point worrying too much about which motherboard it comes with. The manufacturer will generally choose the most appropriate one for the PC specification you want. When it comes to upgrading, however, it is worth doing some homework.
 As technology advances so quickly, it's advisable to look at replacing the motherboard if you're upgrading your processor. Even if the new processor is compatible with your old board (which is highly unlikely), you won't get the full benefit if you instantly hobble the chip by putting it in an old board.

Motherboard manufacture is generally dominated by Taiwanese firms, and as such the names may be unfamiliar. Some brands to look out for are Abit, AOpen, Asus, DFI, Gigabyte and MSI (or Microstar). One name you might have heard of is Intel.
 Motherboard development closely follows processor advancements, so if you're buying a new processor then it's likely a new motherboard will have been designed with it in mind.
 We'll be doing a full round-up of motherboards in our next issue, covering what features to look for and what's currently available on the market.