

WORDS: LARS-GORAN NILSSON & JALAL WERFALLI PICTURES: JULIAN HAWKINS

Home bundles

Searching for a well-rounded machine that will be as happy handling your spreadsheets as it will your children's games? Well look no further, as this month we show you some of the best family PCs for less than £1,000

ith Intel and AMD continuing to play the MHz numbers game, and manufacturers advertising their quickest and most powerful systems ever, we thought it was time to take a step back from this race and concentrate on the ultimate machine that would appeal to

the whole family. Naturally, this should be a computer tailor-made for both adults and children as well as students and home workers. So with this in mind, we set a generous minimum spec comprising an 800MHz processor coupled with no less than 128MB of memory and a 15GB hard drive. That should be more than enough to see those using office applications such as word processing and spreadsheets safely to home base.

Now with the kids in mind – and, of course, the after-hours students and adults – gaming is an issue that cannot be overlooked. We therefore wanted all the review systems to come complete with a graphics subsystem that could cope with the latest game releases on top of those mundane office tasks. The PC we had in mind would also be one that encompassed the multimedia experience that both the Internet and the entertainment industries now offer. To this extent a modem, 17in monitor, CD or DVD-ROM drive, audio and speakers, and Microsoft's Windows Me were all basic requirements. Some form of backup or removable storage device was also a prerequisite. In addition, we were on the lookout for anything that made a system stand out from the crowd, without detracting from the quality or balance of the essential components. This could be a scanner or a printer, both welcome additions for home use, education and work, but not specifically called for in our invitation.

Finally, the asking price. For all this we decided to go for a more open budget of £999 excluding VAT but taking into account delivery and any credit card surcharge, giving our invitees plenty of room to spread their wings.

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GROUP TEST FAMILY PCS

Atlas Meridian A1G PWJ

PRICE £1,173.83 inc VAT CONTACT Atlas 020 8532 6515 www.atlasplc.com

PROS TV-tuner; large hard drive; USB sockets CONS 3D performance is a little down

OVERALL An admirable showing from Atlas, with a good system for a range of users

FEATURES PERFORMANCE PERFORMANCE

VALUE FOR MONEY

OVERALL

Even though there are faster processors in this group test, Atlas has managed to squeeze all it can from the 1GHz AMD Athlon and 128MB of PC133 memory in its machine. There are also a few extras to appeal to the home user

The Meridian houses an Asus A7V motherboard, offering an extra three USB ports, bringing the total to five. This makes the system ideal for connecting to many of today's peripherals. The motherboard also has four dedicated PCI slots, with the fifth sharing its place with an AMR slot. While two of these remain free for upgrades, the other three are filled by a generic 56K V.90 PCI modem, a Prolink TV-tuner card, and a Creative SoundBlaster Live! 5.1 sound card. The latter gets to really express itself over those six channels courtesy of the Cambridge Soundworks 5.1 surround-sound speakers.

With a top-notch sound system you'd expect the graphics subsystem

to be as good. However, the nVidia GeForce2 MX card sporting 32MB of memory leaves the Meridian trailing behind PCs equipped with faster boards. That said, it can handle most games and applications. S-Video and composite ports are also built-in.

Completing the picture is a fine example of a 17in monitor that uses an FD Trinitron tube to create a crisp and visually flat image. It also has a fine 0.24mm grille pitch and a maximum flicker-free resolution of 1,280 x 1,024 at 75Hz.

Inside is an impressive 46.1GB IBM hard drive married to the A7V's UltraDMA100 channel for optimum performance, and a BurnProof Teac CD-RW for backups. There's also a 12-speed Hitachi DVD-ROM drive. In this configuration, you're left with one 5.25in and two 3.5in bays free.

With a Lexmark Z12 inkjet printer, a Logitech webcam, plus a copy of SmartSuite Millennium, the Meridian is a good all-round performer.



Compute IT D850 Explorer Pro

PRICE £1,173.83 inc VAT CONTACT Compute IT 08707 487 487 www.it-pc.co.uk

PROS Radeon card; decent monitor CONS No peripherals; slower 2D performance

OVERALL Good for video-editing and watching DVD movies, but not as rounded as others

FEATURES PERFORMANCE

VALUE FOR MONEY OVERALL

Last month, Compute IT made its *PCW* debut with a machine based on an 850MHz AMD Duron processor plugged into a Soltek SL-75KAV motherboard. This month the combination is the same, apart from an extra 128MB stick of PC133 memory, bringing the total to 256MB. You might think this would have impacted on 2D performance, but it came a poor second from last in all the SYS-

However, this PC does boast excellent 3D scores as well as fine DVD playback and video-editing facilities thanks to the impressive ATI Radeon graphics card, which has 64MB of DDR memory, video-in and video-out connectors, and built-in hardware-based DVD support.

mark benchtests.

In addition, this PC is fitted with a FireWire card that has three external and one internal ports.

Showing off the Radeon is a 17in Mitsubishi Diamond Pro 730 monitor that provides a flat, detailed and vibrant display courtesy of the aperture-grille Diamondtron NF tube and its 0.25mm grille pitch.

Catering for storage is a 30.7GB hard drive from Maxtor that is fully compatible with the motherboard's UltraDMA100-enabled VIA 686B southbridge chip. Files from this can be quickly burned to CD thanks to the Yamaha CD-RW drive that writes at 16-speed and rewrites at 10-speed.

An empty drive bay of each size is available for expansion, plus a dedicated PCI slot and a shared PCI/ISA slot. The FireWire card, a V.90 modem and Creative SoundBlaster 1024 card occupy the other slots. The latter is a good choice and, together with the FPS-1000 speakers, offers decent four-point surround sound.

On the whole, this is a PC that, in terms of internal components, should appeal to the whole family. However, the absence of any extras, such as a printer and scanner, has denied Compute IT an award.

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Elonex Webrider Pro

PRICE £1,173.83 inc VAT CONTACT Elonex 020 8452 4444 www.elonex.co.uk

PROS Fast processor; ample memory; 19in monitor CONS No sound card; poor speakers

OVERALL Capable, but not quite our idea of the ultimate family PC
FEATURES
PERFORMANCE

VALUE FOR MONEY OVERALL OVERALL

Elonex has supplied the fastest processor for this month's group test in the form of a 1.3GHz Athlon. This is the latest and fastest chip from AMD but it still uses a 200MHz bus.

The MSI K7T Pro2 v.2 motherboard is based on the VIA KT133 chipset and the 686B southbridge supporting UltraDMA100 drives. In order to improve the speed of the system even more Elonex has supplied a massive 256MB of PC133 SDRAM.

The Gainward GeForce2 MX graphics card comes with a few extras as it supports nVidia's Twin-View technology, enabling you to use it with two monitors. There's also a composite TV-out connector. It's a shame that the rest of the system doesn't quite follow the same high specifications.

Elonex has supplied a 56K PCI modem, but strangely enough no sound card, relying instead on the onboard AC97 software audio, which

is a bit of a letdown. The 40GB Fujitsu hard drive should be more than enough for most current needs. The 12x 8x 32x CD-RW comes from Acer, and there is a 16-speed Panasonic DVD-ROM drive.

The set of Creative CSW-100 speakers consists of two satellites and a subwoofer.

Elonex is the only manufacturer to supply a 19in monitor this month, its own-brand V999. Sadly, it can't be considered a top-of-the-range unit, although it is capable of a top resolution of 1,600 x 1,200 at a flicker-free 75Hz refresh rate.

The Elonex puts in a fair SYSmark 2000 performance, but a score of 202 shows that DDR alternatives do offer a slight performance boost. We have seen slower CPUs in DDR-based motherboards churning out higher scores.

This is a respectable system for the price, but it's not quite rounded enough to win an award.



evesham.com Axis 900D

PRICE £1,173.83 inc VAT CONTACT evesham.com 08707 287 070 www.evesham.com

PROS Future-proof system; good components CONS Could be faster

OVERALL A respectable system that offers the best upgrade path this month

FEATURES PERFORMANCE PERFORMANCE

VALUE FOR MONEY OVERALL OVERALL

evesham.com is the only manufacturer to supply a DDR system this month, although it is a very odd setup. Based on a 900MHz AMD Duron processor, it also plays host to 128MB of PC1600 DDR SDRAM.

This places the system in two camps, as the processor is AMD's latest budget chip, but the Asus A7M266 motherboard is a top-of-the-range DDR board based on the AMD 760 chipset. This supports the new AMD Athlon processors that use a 266MHz front-side bus. The combination seems to work well, making the Axis 900D as future-proof a system as you will find.

The rest of the spec consists of a Chaintech GeForce2 MX graphics card with TV-out. The sound processor is a Creative SoundBlaster Live! 5.1 card, bundled with the Cambridge Soundworks DTT2200 Dolby Digital speakers. This, together with a Pioneer DVD-116, offers an excellent home cinema setup.

Storage comes in the shape of a 30.7GB Maxtor Diamond Max Plus 60 hard drive and an 8x 8x 32x CD-RW from Samsung. There is also a Diamond Supra 56K PCI modem, and two extra USB ports.

The Mitsubishi Diamond Pro 730 monitor is capable of a maximum flicker-free resolution of 1,600 x 1,200 at a 75Hz refresh rate. Microsoft Works Suite 2001, complete with a full copy of Word 2000, is included.

Overall, this is a respectable family PC, even if it doesn't include the printer and scanner submitted by some manufacturers. Performancewise, it has little to offer when compared to the other Duron systems this month, although it offers a better platform for future upgrades. It's hard to find any faults in this system, but if we were to mention anything at all, it would have to be the choice of processor, as the Duron is not something we would have expected to see in a DDB motherboard.

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GROUP TEST FAMILY PCS

Intellect Computers Power+ 933

PRICE £1,173.83 inc VAT CONTACT Intellect 0161 429 9911 www.intellect.uk.com
PROS 256MB memory; printer; office suite CONS Small backup device; poor sound

OVERALL A fair attempt, but outclassed by its rivals

FEATURES PE

PERFORMANCE OVERALL

Intellect has again opted for an Intel Pentium III processor but, compared to May's entry, the CPU is higher-clocked, at 933MHz. This is plugged into the FC-PGA socket of an MSI MS-6309 motherboard, where it is backed up by 256MB of PC133 memory, leaving two DIMM slots free.

The motherboard uses the newer VIA 686B chipset that supports the UltraDMA100 standard and complements the 30.7GB hard drive well. This should provide plenty of storage, but for large backups the Panasonic LS-120 drive and its 120MB 3.5in media may be insufficient. We would prefer to see a CD-RW and a standard floppy. The remaining drive is a 12-speed LG DVD-ROM. There are two 5.25in and two 3.5in bays free.

For 3D performance, Intellect has chosen an nVidia GeForce2 MX-based card from Hercules. This has no extra ports and 32MB of video memory onboard – but the Intellect had the lowest 3D scores.

The 17in AOC Spectrum 7Glr monitor makes use of a shadow-mask tube to display the picture. This is reasonably sharp but suffered from poor screen regulation.

Instead of a separate sound card, Intellect has saved on the budget by choosing the motherboard's AC97-compliant sound chip. The sound quality is not as good as most here and the Jazz stereo speakers cannot compete with the other surround-sound setups.

Without a sound card and only a Conexant V.90 modem occupying a PCI slot, there are three dedicated slots free and a shared ISA/PCI slot. There's also an AMR slot in between the AGP and the first PCI slot.

The package comes with an Epson Inkjet printer, Microsoft Works Suite 2001, an optical Microsoft Intellimouse and Internet Keyboard.

Overall, not a bad system for the home, but in terms of features and performance it's not up to scratch.





Mesh Matrix 1000 UFPC

PRICE £1,173.83 inc VAT CONTACT Mesh 020 8208 4706 www.meshcomputers.co.uk
PROS Excellent value for money; good specs CONS No TV-out; low-resolution monitor

OVERALL A clear winner with the best bang for the buck

FEATURES PERFORMANCE

VALUE FOR MONEY OVERALL OVERALL

Mesh has once again provided us with an excellent system and offers a surprisingly good bundle to boot. It is not the fastest in this group, but it sports the usual Mesh feel of quality. The processor is AMD's 1GHz Athlon, and Mesh supplies a generous 256MB of BAM.

The motherboard is the new Asus A7V133 based, perhaps not surprisingly, on the VIA KT133A chipset. This supports the new 266MHz bus speed Athlon, so it should at least offer some future proofing.

Handling graphics is a 64MB GeForce2 MX card from Hercules. Although we found it offers little in the way of a performance increase when compared to the 32MB cards, it's good to see something slightly different, even though we would have preferred a card with TV-out.

The only small letdown is the SoundBlaster Live! 1024 sound card, which does not have the 5.1 channel capabilities of some of the other

systems. This feeds a set of Cambridge Soundworks FPS 1000 speakers, which are beaten by some of the speakers bundled by other manufacturers this month.

For storage, there's a 40GB Western Digital hard drive and an eight-speed Teac CD-RW. The DVD drive comes courtesy of Pioneer and reads discs at 16-speed. The monitor is a 17in Mitsubishi Diamond Plus 73, but sadly topped out at a flicker-free resolution of 1,024 x 768.

Mesh excels with the accessories, which comprise a Lexmark Z42 printer, Umax Astra 2100U USB scanner and Logitech QuickCam Pro 3000 webcam. These all add to overall value for money. We were pleased to find a bundled copy of Microsoft Works Suite 2000, which includes a full copy of Word 2000.

Overall, Mesh has supplied a system that is very close to what we would call the perfect family PC. Shame about that monitor, though.

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Multivision Vision Value XL

PRICE £1,173.83 inc VAT CONTACT Multivision 0121 550 8000 www.multivision.co.uk

PROS Fast processor; quality CD-RW; excellent speakers CONS No TV-out

OVERALL A respectable system that offers good value for money, but it's got its faults

FEATURES PERFORMANCE VALUE FOR MONEY PERFORMANCE VALUE FOR MONEY PERFORMANCE P

Multivision has supplied an

Multivision has supplied an excellent system, although it is not quite what we would have expected for the ideal home PC. The processor is a 1.2GHz AMD Athlon and is partnered with 128MB of RAM. This is fitted into an 8KTA2 motherboard from EPoX, which uses the VIA KT133 chipset and the new southbridge that offers UltraDMA100 support.

Storage is handled by a 40GB Western Digital hard drive and a Mirai BurnProof CD-RW. There is also a 16-speed Pioneer DVD-ROM unit, for easy disc-to-disc copying.

More interesting is the new GeForce2 MX card from Hercules that hosts an amazing 64MB of graphics memory. Performance-wise, it offers little improvement on the 32MB cards, although it is able to handle larger textures. There is also a standard 56K PCI modem.

A welcome feature is the Video-Logic Sonic Fury sound card, which is married to a set of Digi Theatre LC speakers, offering excellent surround-sound for DVD playback and great performance in the latest games. What we do miss, however, is a TV-out option of some kind, as you have to use the system monitor to watch DVDs, which is hardly ideal. That said, LG's 17in Flatron 775FT monitor produces a consistently good image.

The Value XL did well in our benchmarks and was the second fastest system in the SYSmark 2000 scores, although it lagged behind some of the others in the 3D benchmarks.

Software-wise, Multivision has supplied just a copy of Lotus Smart-Suite Millennium, which is less than inspiring compared to the packages bundled by some of the competition. At this price point, we would have liked Works Suite at least.

Multivision has put together a capable system for this group test, but a few minor issues mean that it just misses out on an award.



Highly Comments

NEC Direction SM-800AD

PRICE £1,173.83 inc VAT CONTACT NEC 0870 010 6322 www.nec-online.co.uk

PROS Hard drive; printer; scanner; monitor **CONS** Slow CPU; odd use of components

OVERALL You could do a lot worse than this system from NEC

FEATURES PERFORMANCE

VALUE FOR MONEY OVERALL OVERALL

NEC has supplied a microATX system and opted for an MSI motherboard based on the VIA KM133 chipset. This is designed as a low-cost solution geared towards the lower end of the market, incorporating integrated graphics and sound.

The CPU, an 800MHz AMD Duron, follows the same theme. This is nothing out of the ordinary, but NEC has boosted the system quite a bit through the addition of a GeForce2 GTS card with 32MB of DDR SGRAM and TV-out. This makes the system fairly unbalanced in performance terms, as it was the slowest when subjected to SYSmark 2000, yet one of the fastest in our 3D benchmarks.

You'll also find 128MB of PC133 SDRAM, an enormous 61.5GB Quantum Fireball hard drive, and a Sony CD-RW capable of producing CDs at a reasonable eight-speed and CD-RWs at quad-speed. There is also a 16-speed Pioneer DVD-ROM drive and a standard 56K PCI modem.

NEC has been generous with the peripheral bundle, which includes a Hauppauge external USB TV-tuner, a Lexmark Z22 printer, and HP Scanjet 2100C scanner. There's also a reasonable set of Labtec LCS-2514 four-point surround speakers. It's a shame, then, that the onboard sound only supports two-channel audio.

The NEC's MultiSync FE750+ monitor, which is based on a Mitsubishi Diamondtron tube, is an excellent display capable of a top flicker-free resolution of 1,600 x 1,200 at a refresh rate of 75Hz. An above average software bundle includes a copy of Works Suite 2000 and Encyclopaedia Britannica.

Overall, this is not a bad system, but it is let down by the processor, which is the slowest in this test. A dedicated sound card and a more powerful processor would have made this a top-notch system, but as it stands it comes with one of the best bundles in this group test.

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GROUP TEST FAMILY PCS

Polar Prestige 1200

PRICE £1,173.83 inc VAT CONTACT Polar 0161 482 7000 www.polartechnology.com
PROS Processor; graphics card CONS Performance; no dedicated sound card

OVERALL Poor value, poor performance

FEATURES PER VALUE FOR MONEY

PERFORMANCE OVERALL

Polar has submitted one of the fastest processors this month, a 1.2GHz AMD Athlon. This is fitted to a mother-board from EPoX, the 8KTA2, supporting UltraDMA100 drives. Polar has populated this with 128MB of RAM and a GeForce2 GTS card from Creative.

Storage comes in the form of a 30.7GB IBM Deskstar hard drive and an 8x 4x 32x CD-RW from Samsung. The setup is completed by a Hitachi DVD-ROM drive and a 56K PCI modem

It's good to see that two extra USB ports are fitted as standard on this PC, but this doesn't make up for the use of the onboard VIA AC97 sound chipset rather then a dedicated card. This feeds Diamond Audio Technology's Pro Media 3025 speakers, comprising two satellites and a subwoofer.

The Polar produced disappointing results in our benchmark tests, ending up as the third slowest system in

the SYSmark 2000 test. It was also the slowest GeForce2 GTS-based system in our 3D benchmarks. We can only put this down to configuration issues. That said, it was still ahead of much of what remained of the pack.

The monitor is a reasonable 710D from Hansol, capable of resolutions up to 1,600 x 1,200 at a flicker-free 75Hz refresh.

The only issue we have with the unit we received is that it had some banding on the left-hand side that we were unable to get rid of. In the software department Polar has little to offer, stretching only to a copy of Lotus SmartSuite Millennium. This is below par when others are supplying Works Suite 2001.

Certain issues described above mean that we cannot recommend this machine as it stands. It offers neither the value for money of its contemporaries nor the kind of performance we have come to expect from the 1.2GHz Athlon.



Poweroid.com Poweroid 101

PRICE £1,172.65 inc VAT CONTACT Poweroid.com 0870 220 0444 www.poweroid.com
PROS Good performance; ample memory CONS Obsolete motherboard with slocket

OVERALL A capable system but poor value for money

FEATURES PERFORMANCE PERFORMANCE

VALUE FOR MONEY OVERALL

Poweroid.com is a new name here at *PCW* and its first submission is based on an Intel Pentium III 933MHz processor and a hefty 256MB of RAM. The Chaintech motherboard is a very strange beast: a Slot-1 board with a slocket fitted. We are uncertain why Poweroid.com chose this approach, especially as there is no shortage of Socket 370 boards around.

However, the system performed well, outgunning the similarly specified Intellect system. The Asus GeForce2 GTS graphics card is one of the company's 'Pure' cards that lack all the extra bits you'll find on more expensive models. That said, it does still come with 32MB of DDR SGRAM.

The sound card is Creative's older SoundBlaster Live! 1024, while the speakers are an average set of Cambridge Soundworks FPS 1000s. Communication is handled by a standard 56K PCI modem.

The 30.7GB Deskstar hard drive comes from IBM, while backup is

handled by a Sony CRX-140E CD-RW drive, which can only be considered a fairly middle-of-the-road unit that is capable of producing CDs at eight-speed and CD-RWs at quad-speed. You'll also find a Toshiba DVD-ROM running at a respectable 12-speed, which makes good use of a 17in liyama VisionMaster Pro 411 monitor, capable of a top flicker-free resolution of 1,280 x 1,024 at 75Hz.

Lotus SmartSuite Millennium is the only useful package supplied in the software bundle, although a free copy of Soldier of Fortune comes with the graphics card. As for performance, the Poweroid.com system is above average but far from the fastest system this month. However, it did produce respectable scores in the 3D benchmarks, coming in among the top three.

Overall, this is not a bad system, but we cannot recommend it on account of the outdated choice of motherboard and slocket.

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Systemax A1200RV Lifestyle 0670

PRICE £1,173.83 inc VAT CONTACT Systemax 08707 297 366 www.systemaxpc.co.uk PROS Performance; speakers; graphics card CONS Budget CD-RW and DVD-ROM

OVERALL Well specified, but offers less than Mesh. Good if you don't need a printer

FEATURES PERFORMANCE OVERALL

VALUE FOR MONEY

Systemax is one of four contenders this month to supply us with a 1.2GHz Athlon-based system, and we were rather impressed with the Lifestyle's components, considering our budget.

For your £999 you get 128MB of RAM and a new revision of the Biostar 7VKB motherboard, now supporting UltraDMA100. Storage comes in the form of a 40.9GB Maxtor hard drive, a 12-speed CTX DVD-ROM drive, and an aging Philips CD-RW that can burn CDs at eight-speed and CD-RWs at quad-speed.

Graphics are handled by a 3D Power GeForce2 GTS-based card with 32MB of DDR SGRAM. This is an excellent addition, and one of the fastest tested this month. If you prefer to play your DVDs on a television instead of the 17in LG Flatron 775FT monitor Systemax has supplied, there is a TV-out port. The monitor is a reasonable display capable of 1,152 x 864 at a flicker-free refresh of 75Hz.

The sound card is a Creative SoundBlaster Live! 5.1, and there is also a set of Cambridge Soundworks DTT 2200 speakers to make the audio experience complete. This should provide excellent sound for DVD playback and combined with that TV-out option you can get a reasonable home cinema feel from

Communication is handled by a 56K PCI modem. Bundled software is a little sparse, running to only a copy of Lotus SmartSuite Millennium.

Overall, this is a very good system that performed well in our benchmarks. Its 3D scores can be attributed mainly to the faster graphics card. Although the internal components are pretty impressive, there is nothing all that special about this machine. However, when it comes to the crunch you could do a lot worse than Systemax's Lifestyle 0670, which is a fast, well-built machine at a fair price.



Tiny Performance Writer

PRICE £1,174.18 inc VAT CONTACT Tiny 0800 783 9812 www.tiny.com/uk

PROS Large hard drive; good bundle CONS Underperforms; no UltraDMA100 support

OVERALL A reasonable family system beaten to the finishing line by the competition

FEATURES PERFORMANCE

VALUE FOR MONEY OVERALL ____

Tiny has, as always, supplied a good bundle with this system. We were surprised, therefore, to find a 1.2GHz AMD Athlon processor hiding inside this machine, as Tiny usually spends money on the bundle rather than the chip. The motherboard is another unit from MSI based on the VIA KT133 chipset, although this board doesn't have support for UltraDMA100.

Tiny has also fitted 128MB of PC133 RAM, a GeForce2 MX graphics card with 32MB of memory plus a 56K CNR modem. Sound is supplied by an onboard Creative SoundBlaster PCI 128, which offers better sound quality than the AC97 solutions found on most other integrated motherhoards

It's a shame that the speakers which are some of the smallest we have seen this month - don't offer much in terms of sound quality. There is, however, plenty of storage space as Tiny has supplied a massive 40.9GB Maxtor hard drive.

Removable storage comes in the form of a Panasonic CD-RW capable of burning CD-Rs at eight-speed and CD-RWs at guad-speed. There is also a Panasonic DVD-ROM drive, which runs at eight-speed. A new feature is two front-mounted USB ports that are situated at the bottom of the system case.

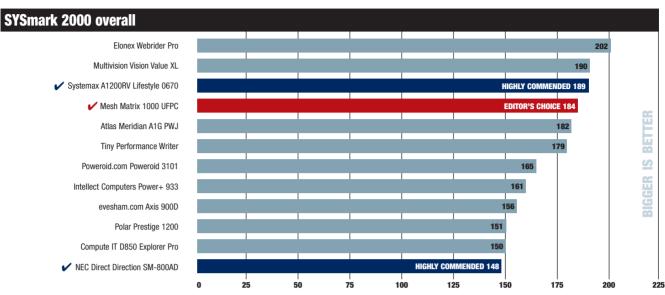
The monitor is an excellent 17in 795FT Plus Flatron from LG, capable of resolutions up to 1,600 x 1,200 at 75Hz, and has a built-in four-port USB hub.

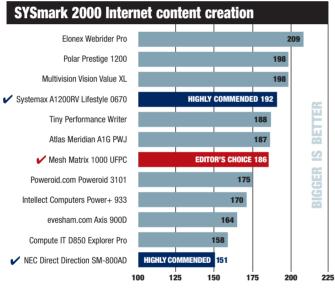
To complete the system there is a fairly basic Lexmark Z32 printer and a Tiny-branded 600dpi USB scanner. In the software department there's a copy of Microsoft Works Suite 2001, including the customary full copy of Word 2000, plus there's Tiny's Home Education Pack.

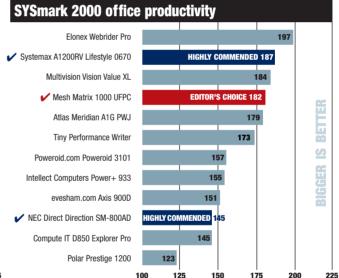
All in all, this is a respectable system, but it falls short in our benchmarks and is beaten by a couple of systems with slower processors.

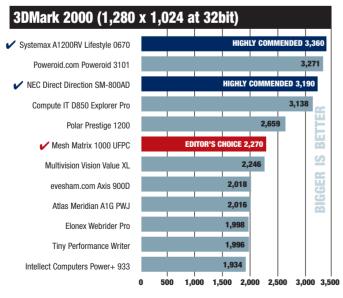
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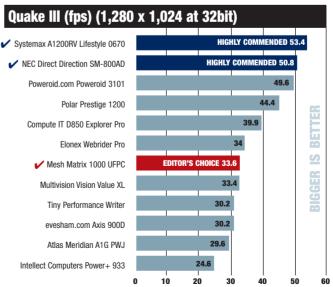
LAB RESULTS











Please see page 68 for an explanation of how we tested the PCs

TABLE OF FEATURES

MANUFACTURER	ATLAS	COMPUTE IT	ELONEX	EVESHAM.COM	INTELLECT COMPUTERS
MODEL NAME	MERIDIAN	D850 EXPLORER	WEBRIDER PRO	AXIS 900D	POWER+ 933
	A1G PWJ	PRO			
Price (ex VAT)	£999	£999	£999	£999	£999
Price (inc VAT)	£1,173.83	£1,173.83	£1,173.83	£1,173.83	£1,173.83
Telephone	020 8532 6515	08707 487 487	020 8452 4444	08707 287 070	0161 429 9911
URL	www.atlasplc.com	www.it-pc.co.uk	www.elonex.co.uk	www.evesham.com	www.intellect.uk.com
HARDWARE SPECS					
Processor	AMD Athlon 1GHz	AMD Duron 850MHz	AMD Athlon 1.3GHz	AMD Duron 900MHz	Intel Pentium III 933MHz
RAM/type	128MB/PC133	256MB/PC133	256MB/PC133	128MB/PC1600 DDR	256MB/PC133
Occupied RAM slots/spare RAM slots	1/2	2/1	1/2	1/1	1/2
Max memory in this configuration (without removing existing memory)	1.15GB	768MB	1.25GB	768MB	1.25GB
Maximum memory supported by motherboard	1.5GB	1.5GB	1.5GB	1GB	1.5GB
Hard disk (manufacturer and model)	IBM Deskstar DTLA-307045	Maxtor 53073H4	Fujitsu MPG3409AH	Maxtor Diamond Max Plus 60	IBM Deskstar DTLA-307030
Hard disk size/interface	46.1GB/EIDE	30.7GB/EIDE	40GB/EIDE	30.7GB/EIDE	30.7GB/EIDE
Storage drive manufacturer and model	Teac CD-W512E BurnProof	Yamaha CRW2100E	Acer 12x 8x 32x	Samsung SW-408B	Panasonic LS-120
Size of storage drive media/Interface	650MB/EIDE	650MB/EIDE	650MB/EIDE	650MB/EIDE	120MB/EIDE
MOTHERBOARD COMPONENTS					
Motherboard manufacturer	Asus	Soltek	MSI	Asus	MSI
Model/chipset	A7V/VIA KT133	SL-75KAV-X/VIA KT133A	K7T Pro2 v.2/VIA KT133+686B	A7M266/AMD760+VIA 686B	MS-6309/VIA Pro133A
	711 77 11 11 100	02 70771 777111110071	1111102 112 1111111110010000	7.1.11.200/7.11.157.007.711.10005	1110 00007 11111 1010071
EXPANSION AND I/O					
No of 3.5/5.25in bays	4/3	3/3	4/3	3/3	4/3
No of free 3.5/5.25in bays	2/1	1/1	2/1	1/1	2/2
No of PCI/ISA/shared/AMR slots	4/0/1/0	4/0/1/0	5/0/1/0	4/0/1/0	4/0/1/1
No of free PCI/ISA/shared/AMR slots	2/0/0/0	1/0/1/0	4/0/1/0	2/0/0/0	3/0/1/1
No of USB/serial/parallel/PS/2	5/2/1/2	2/2/1/2	2/2/1/2	4/2/1/2	2/2/1/2
MULTIMEDIA	3/2/1/2	22112	22112	4/2/1/2	2/2/1/2
DVD manufacturer/model	Hitachi/GD-7500	Pioneer/DVD-105 (slot)	Panasonic SR-8586	Pioneer DVD-116	LG/DRD-8120B
DVD speed/interface	12x/EIDE	16x/EIDE	16x/EIDE	16x/EIDE	12x/EIDE
Sound card manufacturer	Creative Labs	Creative Labs	VIA	Creative Labs	VIA
Sound card model	SoundBlaster Live! 5.1	SoundBlaster Live! 1024		SoundBlaster Live! 5.1	***
Sound card model	Soutiudiaster Live! 5. I	Soundbiaster Live: 1024	AC97 Codec (onboard)	Souriodiaster Live! S. I	AC97 Codec (onboard)
Speakers manufacturer and model	Cambridge Soundworks	Cambridge Soundworks	Creative Labs CSW100	Cambridge Soundworks	Jazz Game Beast
Speakers manufacturer and model	Desktop Theater 5.1 DTT2200	FPS-1000	CIERLINE LADS CONTIOU	DTT2200	Jazz danie deasi
Graphics card manufacturer and model	Chaintech GeForce2 MX	ATi Radeon	Gainward	Chaintech GeForce2	Haraulaa 2D Branhat II MV
Graphics card manufacturer and moder	CHAINLECH GEFOICEZ IVIX	ATI Naueuti	Galliwalu	MX with TV-out	Hercules 3D Prophet II MX
Chinaat	nVidio CoForce OMV	Dadoon	nVidio CoForce O MV		nVidio CoForceO MV
Chipset	nVidia GeForce2 MX	Radeon	nVidia GeForce2 MX	nVidia GeForce2 MX	nVidia GeForce2 MX
Memory and type	32MB SDRAM	64MB DDR SDRAM	32MB SDRAM	32MB SDRAM	32MB SDRAM
Graphics card interface	AGP	AGP	AGP	AGP	AGP
Monitor manufacturer and model	CTX PR705F	Mitsubishi Diamond Pro 730	Elonex V999	Mitsubishi Diamond Pro 730	AOC Spectrum 7Glr
Monitor size/max viewable diagonal	17in/16in	17in/16in	19in/18in	17in/16in	17in/16in
Maximum resolution at VESA refresh	1,280 x 1,024 at 75Hz	1,600 x 1,200 at 75Hz	1,600 x 1,200 at 75Hz	1,600 x 1,200 at 75Hz	1,600 x 1,200 at 75Hz
OTHER INFORMATION	Canada FOI/MOO DOI	Consulat HOE VOC FOU DO	Onnevent 1105 1/00 501/ DOI	Diamond C OOT	Consumat HOE VOO FOLK DOL
Modem manufacturer and model	Generic 56K V.90 PCI	Conexant HCF V.90 56K PCI	Conexant HCF V.90 56K PCI	Diamond Supra SST	Conexant HCF V.90 56K PCI
	70	5. 11.		56i Pro DF	5 01 21 22
Misc hardware	TV-tuner, Logitech QuickCam	FireWire card			Epson Sylus Colour 680
	Express, Lexmark Z12	(3 + 1 internal ports)			
Bundled software	Lotus SmartSuite Millennium	Lotus SmartSuite Millennium	Microsoft Works Suite 2001	Microsoft Works Suite 2001	Microsoft Works Suite 2001
Standard warranty (RTB = return to base, C&R = collect and return)	1st year on-site, 2 years RTB	1st year on-site, 2 years RTB	1st year on-site, 2 years RTB	2 years on-site, 3rd year RTB	1st year on-site, 2 years RTB

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Editor		Highly			Highly	
		- Committee				
MESH	MULTIVISION	NEC DIRECT	POLAR	POWEROID.COM	SYSTEMAX	TINY
MATRIX 1000 UFPC	VISION VALUE XL	DIRECTION SM-800AD	PRESTIGE 1200	POWEROID 3101	SYSTEMAX A1200RV	PERFORMANCE
					LIFESTYLE 0670	WRITER
£999	£999	£999	£999	£998	£999	£999.30
£1,173.83	£1,173.83	£1,173.83	£1,173.83	£1,172.65	£1,173.83	£1,174.18
020 8208 4706	0121 550 8000	0870 010 6322	0161 482 7000	0870 220 0444	08707 297 366	0800 783 9812
www.meshcomputers.com	www.multivision.co.uk	www.nec-online.co.uk	www.polartechnology.com	www.poweroid.com	www.systemaxpc.co.uk	www.tiny.com/uk
AMD Athlon 1GHz	AMD Athlon 1.2GHz	AMD Duron 800MHz	AMD Athlon 1.2GHz	Intel Pentium III 933MHz	AMD Athlon 1.2GHz	AMD Athlon 1.2GHz
256MB/PC133	128MB/PC133	128MB/PC133	128MB/PC133	256MB/PC133	128MB/133MHz	128MB/133MHz
1/2	1/2	1/1	1/2	1/2	1/2	1/1
768MB	1.1GB	768MB	1.1GB	1.1GB	1.1GB	768MB
1.5GB	1.5GB	1GB	1.5GB	1.5GB	1.5GB	1GB
Western Digital WD400	Western Digital WD 400BB	Quantum Fireball Plus AS	IBM Deskstar DTLA-307030	IBM Deskstar DTLA-307030	Maxtor Diamond Max VL 40	Maxtor Diamond MaxPlus 40
40GB/EIDE	40GB/EIDE	61.5GB/EIDE	30.7GB/EIDE	30.7GB/EIDE	40.9GB/EIDE	40.9GB/EIDE
Teac CD-RW CDW58E	Mirai CRD-BP1400P	Sony CRX140E	Samsung SW-208B	Sony CRX140E	Philips CRW804	Panasonic CW-7586
650MB/EIDE	650MB/EIDE	650MB/EIDE	650MB/EIDE	650MB/EIDE	650MB/EIDE	650MB/EIDE
Asus	EPoX	MSI	EPoX	Chaintech	Biostar	MSI
A7V133/VIA KT133A	8KTA2/VIA KT133+686B	MS-6340/VIA KM133	8KTA2/VIA KT133+686B	6ATA4/VIA Pro133A	M7VKB/VIA KT133+686B	MS-6340/VIA KT133
0.10	4/4	0.10	5/0	4/0	0/4	0/0
3/3	4/4	3/2	5/2	4/3	3/4	3/2
1/1	2/2	1/0	3/0	2/1	2/1	1/0
4/0/1/0 2/0/0/0	5/0/1/0 3/0/1/0	2/0/1/0	5/0/1/0 4/0/1/0	5/0/1/0 3/0/1/0	4/0/1/1 2/0/1/1	2/0/1/0
4/2/1/2	2/2/1/2	3/1/1/2	4/0/1/0	2/2/1/2	2/2/1/2	4/2/1/2
4/2/1/2	בוט ווצ	3/1/1/2	4/2/1/2	22112	22112	4/2/1/2
Pioneer DVD-115	Pioneer DVD-105	Pioneer DVD-115	Hitachi GD-7500	Toshiba SD-M1402	CTX DVD-8212	Panasonic SR-8585F
16x/EIDE	16x/EIDE	16x/EIDE	12x/EIDE	12x/EIDE	12x/EIDE	8x/EIDE
Creative Labs	VideoLogic	VIA	VIA	Creative Labs	Creative Labs	Creative Labs
SoundBlaster Live! 1024	Sonic Fury	AC97 Codec (on board)	AC97 Codec (onboard)	SoundBlaster Live! 1024	SoundBlaster Live! 5.1	SoundBlaster
	•	,	,			PCI 128 (onboard)
Cambridge Soundworks	VideoLogic Digi Theatre LC	Labtec LCS-2514	Diamond Pro Media 3025	Cambridge Soundworks	Cambridge	Tiny M-2122
FPS 1000				FPS 1000	Soundworks DTT 2200	
Hercules 3D	Hercules 3D	Leadtek GeForce2 GTS	Creative Labs 3D Blaster	Asus V7700 Pure	3D Power UK GeForce2 GTS	3D Power UK
Prophet II MX 64MB	Prophet II MX 64MB		GeForce2 GTS			
nVidia GeForce2 MX 400	nVidia GeForce2 MX 400	nVidia GeForce2 GTS	nVidia GeForce2 GTS	nVidia GeForce2 GTS	nVidia GeForce2 GTS	nVidia GeForce2 MX
64MB SDRAM	64MB SDRAM	32MB DDR SGRAM	32MB DDR SGRAM	32MB DDR SGRAM	32MB DDR SGRAM	32MB SDRAM
AGP	AGP	AGP	AGP	AGP	AGP	AGP
Mitsubishi Diamond Plus 73	LG Flatron 775FT	NEC MultiSync FE750+	Hansol 710D	liyama VisionMaster Pro 411	LG Flatron 775FT	LG Flatron 795FT Plus
17in/16in	17in/16in	17in/16in	17in/16in	17in/16in	17in/16in	17in/16in
1,024 x 768 at 85Hz	1,152 x 864 at 75Hz	1,600 x 1,200 at 75Hz	1,600 x 1,200 at 75Hz	1,280 x 1,024 at 75Hz	1,152 x 864 at 75Hz	1,600 x 1,200 at 75Hz
Fire FOI/Ve: NA I	0	0-4-50/4400 50	0	II-i F0///00 P0/	0	Outside Links FOIL OND
Etec 56K Voice Modem	Generic Soft 56K V.90 PCI	Generic Soft 56K V.90 PCI	Conexant Soft 56K PCI	Haicom 56K V.90 PCI	Systemax 56K V,90 hardware	Smart Link 56K CNR
Lexmark Z42 printer, Umax Astra		Hauppauge WinTV USB,				Lexmark Z32,
2100U USB scanner, Logitech		Lexmark Z22, HP Scanjet 2100C				Tiny USB scanner
Quickcam Pro 3000 webcam		, , , , , , , , , , , , , , , , , , , ,				
Microsoft Works Suite 2000	Lotus SmartSuite Millennium	Microsoft Works Suite 2000,	Lotus SmartSuite Millennium	Lotus SmartSuite Millennium	Lotus SmartSuite Millennium	Microsoft Works Suite 2001,
		Encyclopaedia Britannica				Tiny Home Education Pack
1st year on-site, 2 years RTB	3 years C&R	3 years on-site	1st year on-site, 2 years RTB	1st year C&R, 2 years RTB	1st year C&R, 2 years RTB	3 years C&R

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GROUP TEST FAMILY PCS Editor's Choice

hen it comes to defining the ultimate family PC there are a lot of things to take into consideration.

To start with the system has to be able to cope with the demands of several users, from children playing games and doing homework, to parents using word processors, spreadsheets and more. A family PC can't be designed for the needs of only one person but has to be pretty much all things to all people.

The main purpose of a home computer is still productivity, for example using office applications and performing tasks such as email, Internet access and maybe image editing or even home video editing. But we also know that the majority of people who buy a computer these days want to play games as well as using it for work. We also expected a reasonable sound system to be supplied as most, if not all, systems today come with a DVD drive as standard, making your PC a potential movie machine as well.

Something that is often overlooked when buying a PC is the warranty and this time we asked for a three-year parts and labour deal, with at least the first year on-site or collect and return. We left years two and three up to the manufacturer.

The price limit was set to £999 ex VAT. This is a jump up from what we've asked for in the past two months' issues and gave the manufacturers a slightly larger budget to play with. Overall the systems are not that different from what we saw in the £899 price band, but most come with a bit of added value to justify that extra bit of cash. We were very impressed with what £999 can buy and most of the machines where well rounded and very capable of most if not all the tasks we expected of them.

The winners

The **Editor's Choice** this month goes to the **Mesh Matrix 1000 UFPC**. This is the third month in a row that Mesh has won an award and we feel that, yet again, this is a very well-rounded package. What you get is a great bundle with no corners cut. It's not the fastest system this month, but it still offers above average performance and the choice of components is excellent and makes this a

reasonably future-proof PC. On top of this you get a printer and scanner as well as a copy of Microsoft Works Suite 2000.

The 1 GHz AMD Athlon processor is starting to look a bit long in the tooth, but we can't really complain at this price point. 256MB of memory is generous for any home user for the foreseeable future. The graphics card is a solid 3D Prophet II MX from Hercules, but with a bit of a twist as it offers 64MB of graphics memory compared to most other MX cards that only offer 32MB. As always the build quality of this PC is excellent, nothing short of what we've come to expect from Mesh, making it worthy of its award.

Our first Highly Commended award goes to the Systemax A1200RV Lifestyle 0670 as this offers good value and performance for the user who wants a PC without a printer or scanner, but still requires a very capable machine. If you are looking for a system to play games on the A1200RV should be the ideal choice as it comes out on top in our 3D benchmarks. The Cambridge Soundworks DTT2200 speaker system is excellent both for games and DVD playback as, together with the SoundBlaster Live! 5.1 card, it provides Dolby Digital sound. Our only complaint is the budget DVD and CD-RW but these are minor points.

The second Highly Commended award goes to the NEC Direction SM-800AD. This is a bit of an odd machine as it's based on an 800MHz AMD Duron, hence getting the lowest SYSmark 2000 score this month. But don't despair as this is still more than high enough for any office tasks and most users wouldn't even notice the difference. On the other hand, NEC has fitted this system with a GeForce2 GTS card, which more than makes up for the CPU in our 3D benchmarks where it comes near the top of the chart. NEC has supplied an excellent bundle that's not far off what Mesh offers. This, together with a very good 17in monitor, makes the NEC an excellent choice for those who are looking for a well-rounded package but don't need the fastest machine available.

Also worthy of a mention are the Atlas Meridian A1G PWJ and the Compute IT D850 Explorer Pro. They both just missed out on an award but are still very respectable systems.

What you get with the Mesh is a great bundle with no corners cut



Mesh Matrix 1000 UFPC





Systemax A1200RV Lifestyle 0670



NEC Direction SM-800AD

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