

WORDS: RIYAD EMERAN, JALAL WERFALLI PICTURES: MAX BAKER

High & mighty

When you're spending £1,500 on a new PC you'd expect to get a top-of-the-range processor, meaty hard drive, an impressive sound system and a whole lot more. We challenged 13 manufacturers to see which could produce the best high-end PC

here is an air of change in the performance PC arena, which is heavily centred on that vital system component – memory. Prices have always ebbed and flowed in unison with the economic climate, but as you will see in this group test, Double Data Rate (DDR) SDRAM memory is rapidly becoming the norm in high-end systems. Having said that,

PC133-rated memory can still hold its own performance-wise, but appears to be heading for the back seat as more and more DDR motherboards flood the market. Almost all the DDR motherboards in this test are designed with AMD's Athlon processor in mind, but look out for the Pentium 4 platforms with DDR support, expected to launch in the first quarter of 2002.

The overall theme to the group test was kept wide open, with a generous piggy bank of £1,500 excluding VAT but including delivery and any credit card surcharge. While we were looking for high-end machines that offered feature-rich specifications you would be proud to show off to your friends, we also wanted to see an element of future-proofing and a three-year parts and labour warranty.

As ever, we set a minimum specification that included a meaty processor clocked at 1GHz or above, backed by a full 256MB of RAM. We wanted to see at least a 32MB graphics card, a 19in monitor and a decent sound card with speakers, giving you an excellent visual and audio experience.

As well as the basic components you'd expect in most of today's PCs, such as CD or DVD drives and a means to connect to the Internet, our specified criteria requested some form of backup device, a 20GB hard drive or bigger and an office suite, all installed with Microsoft's Windows Me at the helm.

Read on to see how the manufacturers interpreted these requirements, producing some interesting configurations.

CONTENTS

- 56 Atlas Meridian A1300 PWL Compute IT Infinity Pro R-G
- 157 **Dell Dimension 8100 Elonex Webrider Pro**
- 160 evesham.com Axis Ultimate
- Intellect Computers Pro 1000Plus
- 161 Mesh Matrix Pro 1300DDR Inside Intel's Pentium 4
- 164 Multivision Vision RAID 4500 NEC Direct Powermate Select XL3 A1300
- 167 Panrix Magnum 1333 Turbo Polar Panache 1200
- 168 Poweroid.com 3010 Systemax A1300RV Lifestyle 0780
- 169 Performance results
- 170 Table of features
- 173 Editor's Choice

PCW:: JULY 2001

Atlas Meridian A1300 PWL

PRICE £1,761.33 (£1,499 ex VAT) CONTACT Atlas 020 8532 6515

PROS Fast graphics; monitor; TV-tuner; large hard drive **CONS** Less room for upgrades

OVERALL More memory would be better. Pipped by those offering FireWire and RAID

FEATURES PERFORMANCE VALUE FOR MONEY VALUE FOR MONEY VALUE FOR MONEY VALUE VAL

Kicking off this group test with what seems to be a bit of a trend, Atlas' system sports a 1.33GHz AMD Athlon, backed up by PC2100 memory. There's 128MB of DDR SDRAM on a single module, leaving one DIMM slot free on the Asus A7M266 motherboard. However, we've been assured that this will be doubled by the time you read this. Having said that, the Meridian's performance is still very impressive, indicating that Atlas has spent some time configuring the system for maximum speed.

Sticking with performance, the 64MB nVidia GeForce3 based graphics card is no slouch and helps lift the Meridian to fourth spot in all the 3D charts. The graphics card is connected to a 19in CTX PR960F monitor that houses a trusty Sony FD Trinitron aperture-grille tube, which provides excellent contrast, little reflection and vivid colour representation.

Instead of a RAID system, there's a spacious 60GB Quantum hard

drive that meets the UltraDMA100 standard of the board's VIA 686B southbridge chip. This should provide enough storage for some time to come, but if you need to back up your data the LG CD-RW will come in handy. For DVD movie fans, there's a 16-speed DVD-ROM drive also from LG. This leaves one 5.25in, and two 3.5in bays free.

There are only two vacant PCI slots as the ProLink TV-tuner and the Creative SoundBlaster Live! 5.1 sound card take up the other two dedicated PCI slots. The latter is put to good use when connected to the set of Cambridge Soundworks' Desktop Theatre 5.1 speakers. For Internet connection, an Allied Data V.90 modem sits in the shared PCI/AMR slot.

Finally, a Logitech webcam is bundled together with Microsoft Works Suite 2001. All in all the Meridian is a good system, but just misses out because it lacks those extra features seen elsewhere.





Compute IT Infinity Pro R-G

PRICE £1,761.33 (£1,499 ex VAT) CONTACT Compute IT 08707 487487

PROS Great specs for the money; future-proof and quick too CONS No DDR memory

OVERALL A winning system that will last for some time to come

FEATURES PERFORMANCE

VALUE FOR MONEY OVERALL OVERALL

Over the past couple of months, we've seen some good machines from Compute IT and this is no exception. Inside the full-tower ATX case from AOpen is an EpoX EP-8KTA3+ motherboard that makes use of VIA's Apollo KT133A chipset. This supports a new 266MHz bus speed Athlon beating at 1.33GHz.

Compute IT has opted for two 128MB sticks of PC133 SDRAM in preference to PC2100 memory. The performance difference is not huge, but if you wish to add more memory there are another two DIMM slots free.

For storage there are two 30.7GB IBM hard drives coupled to the board's HighPoint RAID controller and set up in a RAID 0 configuration for high I/O rates. If that's not enough you have another two EIDE channels to connect up to four more drives. A Plextor BurnProof CD-RW writes at 16-speed and rewrites at 10-speed. There's also a 16-speed Pioneer DVD-ROM with a slot opening.

With five 3.5in and two 5.25in bays left, there's room to expand. But this may be limited by just two spare power cables and one dedicated PCI slot free. A USB plate with two extra ports also blocks the shared ISA/PCI slot, but this can be removed.

A 64MB nVidia GeForce3-based card from Leadtek provides great 3D performance and also comes with S-Video and DVI sockets. The NEC 19in monitor is good too, providing a stable and sharp picture.

A FireWire card is included with three external ports and one internal, which is ideal for DV editing. Audio comes from a Creative Live! Platinum 5.1 card, and is controlled by an infra-red-enabled Live! Drive IR panel. A set of Cambridge Soundworks DTT2200 speakers completes a great audio setup.

Lotus SmartSuite Millennium, a cordless Logitech keyboard and wheel mouse finish off the Infinity Pro-R, the ultimate future-proof power machine.

Dell Dimension 8100

PRICE £1,585.07 (£1,349 ex VAT) CONTACT Dell 0870 907 5664

PROS P4 if you want CONS Slow; combo drive; no surround sound; average monitor

OVERALL Unfortunately, sticking with an Intel chip made it near impossible to compete
FEATURES PERFORMANCE

VALUE FOR MONEY

OVERALL

Dell only supplies systems based on Intel processors and, as a result, the performance of the Dimension 8100 can't compare with the DDR AMD Athlon machines. That said, it's testament that a higher number doesn't necessarily mean higher performance. The 1.5GHz Pentium 4 CPU in this Dell is the fastest clocked chip on test, but it's no match for a 1.33GHz DDR Athlon.

Backing up the Pentium 4 is 256MB of RDRAM which fills two of the four RIMM sockets on the Dell-designed motherboard based on the Intel 850 chipset.

The black and silver-coloured 8100 stands out from the crowd, but the untidy mass of ribbon and power cables inside is less appealing. There are three 5.25in bays, one of which is filled with a Samsung DVD/CD-RW combo drive. Although this covers both bases and saves space, we would have expected two separate drives at this price. One of the three

internal 3.5in bays is filled with a 40GB Maxtor hard disk.

An nVidia GeForce 2 Ultra card sits in the AGP slot, providing a decent graphics solution. Displaying the signal is a 19in Dell monitor. Although this isn't a bad unit, it uses a shadowmask tube that looks very curved compared to the flat aperture-grille models supplied with other systems.

A Turtle Beach Santa Cruz sound card fills one of the five PCI slots, and pumps its signal out to a set of rather impressive-looking Harmon Kardon speakers. Unfortunately, the speaker set is only made up of two satellites and a sub-woofer, so there's no chance of surround sound for DVD watching or game playing.

The second and final PCI card is a 56K modem. Bundled with the system is a copy of MS Works Suite 2000.

If you're desperate for a Pentium 4 machine the 8100 might be worth a look, but there are faster and betterspecified machines on test.



Elonex Webrider Pro

PRICE £1,761.33 (£1,499 ex VAT) CONTACT Elonex 020 8452 4444

PROS Reasonable 2D performance; tidy build **CONS** Speakers; graphics card driver **OVERALL** A reasonable attempt from Elonex, but not as complete as its opponents

FEATURES PERFORMANCE PERFORMANCE

VALUE FOR MONEY OVERALL

Breaking the 1.33GHz Athlon trend is Elonex's entrant. This features the 1.3GHz Athlon processor that uses a 200MHz front-side bus (FSB). Designed to complement 200MHz PC1600 DDR SDRAM, Elonex has, instead, plugged this Athlon into an MSI K7T Pro2 motherboard that only supports PC133 SDRAM modules. Although it has 256MB of lower clocked memory, the Webrider turned out to be a reasonable performer — with an overall SYSmark score of 212.

Inside, the cables and wires were tied back and out of the way. A roomy 40GB Fujitsu hard drive takes care of the main storage, alongside an Acer CD-RW drive that writes at 12-speed and rewrite at eight. A 16-speed Panasonic DVD-ROM completes the Webrider's optical storage solution.

A SoundBlaster Live! 5.1 sound card is connected to a set of PCWorks speakers from Cambridge Soundworks. These aren't up to the standard of other sound systems, offering

just four-point surround sound, but at least you have a Dolby Digital 5.1 capable sound card in place if you ever decide to upgrade the speakers.

Sitting in the shared PCI/CNR slot is a CNR V.90 modem, leaving four dedicated PCI slots free.

In terms of 3D performance, the Webrider languishes at the bottom of the charts, even though the card is based on nVidia's Geforce2 Ultra chipset, together with 64MB of video memory. This can only be a driver issue, as you would expect similar 3D scores to the Dell or Mesh systems that feature cards with the same chipset. Hooked up to the D-SUB port on the graphics card is an liyama Vision Master 452 monitor, which offers a visually flat screen, good contrast and a stable image.

A copy of MS Office 2000 Premium is included as part of the package. Overall, the Elonex Webrider is a reasonable machine that is let down in a couple of key areas.

PCW :: JULY 2001 157

evesham.com Axis Ultimate

PRICE £1,761.33 (£1,499 ex VAT) CONTACT evesham.com 08707 287 070

PROS CPU; graphics; front-mounted USB ports CONS Limited memory expansion

OVERALL Well-rounded, but motherboard and office suite are not as impressive as others

FEATURES PERFORMANCE VALUE FOR MONEY PERFORMANCE VALUE FOR MONEY PERFORMANCE P

AMD's flagship 1.33GHz Athlon processor provides the power inside evesham.com's offering this month. Based on an Asus A7M266 motherboard, the system is fitted with a healthy 256MB of PC2100 memory, leaving one free DIMM slot for additional memory modules.

Future expansion is catered for by two USB ports mounted on the front of the case. These provide easy access for plugging in peripherals. A SoundBlaster Live! 5.1 sound card and Diamond 56i Pro modem occupy two PCI slots, leaving two additional slots free.

An UltraDMA100 40GB Maxtor hard disk, and a Teac CD-RW that writes and rewrites at 12- and 10-speed respectively cover storage in the Axis Ultimate. A 16-speed Pioneer DVD-ROM drive completes the drive array. Also bundled is a set of Cambridge Soundworks DTT2200 Dolby Digital speakers that offer an ideal home cinema setup.

As one might expect with a system sporting a top-notch processor, evesham.com has opted for nVidia's GeForce3 chipset as the graphics solution, complete with 64MB of DDR SDRAM. This has helped the Axis Ultimate reach the number three spot in both our 3DMark and Quake III tests.

With such an impressive 3D performance, evesham.com has thankfully provided a decent Mitsubishi Diamond Plus 92 monitor that uses a Diamondtron Natural Flat aperturegrille tube. The picture is vibrant and sharp even at the maximum resolution of 1,600 x 1,200 at 75Hz. The nVidia graphics board also carries an S-Video port for gaming on your TV.

evesham.com has bundled a copy of Lotus SmartSuite Millennium with the Axis, but we would have preferred a copy of MS Works Suite 2000 given the generous price limit.

Overall, evesham.com has put together a well-rounded system that is just outshone by the winners.





Intellect Pro 1000Plus

PRICE £1,761.33 (£1,499 ex VAT) CONTACT Intellect 0161 429 9911

 $\textbf{PROS} \ \text{Office SBE; warranty } \textbf{CONS} \ \text{Slow CPU and graphics card; poor performance}$

OVERALL A PIII machine that is outclassed and outperformed by the Athlon competition

FEATURES PERFORMANCE

VALUE FOR MONEY OVERALL OVERALL

Intellect has taken the Dell route and opted for an Intel processor rather than an AMD solution. Unlike Dell, though, Intellect has gone for a Pentium III instead of a Pentium 4. Unfortunately, the fastest Pentium III CPU only runs at 1GHz, so it's a fair bit slower than the 1.33GHz Athlons in other machines.

Backing up the 1GHz Pentium III is 256MB of PC2100 DDR SDRAM in a single DIMM, leaving three slots free for future upgrades. We haven't seen too many DDR Pentium III systems, but the ones we've come across have shown little performance improvement over standard PC133 systems.

It's a shame that Intellect has gone for a GeForce2 MX-based graphics card, albeit a 64MB version, as there's just no comparison between an MX card and the GeForce3 cards. The other half of the display set is more impressive, though. The NEC Multi-Sync FE950+ monitor is a joy to behold and has a detailed OSD to con-

trol it, and the 19in Diamondtron NF tube produces a sharp, vibrant image.

There's only one other expansion card in the Intellect – a 56K modem that fills one of the five PCI slots. There's no sound card because the motherboard has onboard sound, which is a little disappointing, and there's no surround sound on offer from the set of Cambridge Soundworks SW310 speakers.

One of the two internal 3.5in bays is filled with a 30GB IBM Deskstar hard disk, while single external 3.5in and 5.25in bays are also free. The top two 5.25in bays are filled with a Panasonic 16-speed DVD-ROM drive and a Mirai CD-RW.

Rounding off the package is a copy of Microsoft Office 2000 SBE, which is probably the best component in the bundle, a Microsoft Internet keyboard and Intellieye mouse. However, even the three-year on-site warranty isn't enough to recommend the Intellect in light of the superior competition.

Mesh Matrix Pro 1300DDR

PRICE £1,761.33 (£1,499 ex VAT) CONTACT Mesh 020 8208 4706

PROS Well built; reasonably fast CONS No GeForce3; poor USB port placement

OVERALL Another fine system from Mesh, but this time the competition was too strong

FEATURES PERFO

PERFORMANCE OVERALL

Mesh is no stranger to the winner's podium here at *PCW*, so we expect

good things from the company. This time, it has tried to produce the ultimate machine for many uses.

The Matrix Pro 1300DDR is built inside the impressive Mesh miditower case that needs no tools to access the internals and has all the major components laid out in a sensible, unhindered manner.

At the heart of the system is a 1.33GHz AMD Athlon processor backed up by 256MB of PC2100 DDR SDRAM. Both the DDR DIMM sockets in the Asus motherboard are full, which is a shame, but 256MB should be fine for most users.

Mesh has included two extra USB ports but has chosen to mount the backing plate so it blocks a PCI slot, even though there is a spare backing plate above the AGP slot.

Filling the single AGP slot is a Gainward GeForce2 Ultra graphics card, which used to be the pinnacle of

graphics technology. However, the GeForce3 chipset was released recently and many competing systems in this group test sport cards based on this newer technology.

There's an impressive Mitsubishi Diamond Pro 920 19in monitor. Based on the Natural Flat Diamondtron tube this is a great display that produces a superb image at a resolution of 1,280 x 1,024.

Storage is taken care of amply by a 40GB Western Digital hard disk, while two of the three 5.25in bays are filled with a 16-speed Pioneer DVD-ROM drive and a Teac CD-RW drive.

A SoundBlaster Live! 5.1 fills one of five PCI slots and pumps its signal to a set of Desktop Theatre 2200 speakers. The Dolby Digital processing on the card makes this great for DVD watching. There is also a 56K modem and a copy of MS Works Suite 2000.

Although performance is good, the old graphics card lets the Mesh down.



IS INTEL'S PENTIUM 4 TRUE TO THE CORE?

If you are a regular reader of *PCW*, you will probably have noticed that there is a performance difference between systems powered by the latest AMD and Intel processors. While we believe our tests to be a fair indication of a system's overall number-crunching ability in real-world computing, Intel's new Pentium 4 NetBurst micro-architecture is, in its own words, geared toward the 'visual Internet'. This encompasses audio and video encoding, as well as imaging programs, speech recognition and gaming.

NetBurst allows the Pentium 4 core to beat away at higher clock speeds, while its greater pipeline depth (double that of the Pentium III and Pentium Pro P6 core), known as hyperpipelined technology, boosts the processor's frequency and scalability.

More significant is the CPU's support for SSE2 (Streaming SIMD Extensions 2), which enhances the SIMD (Single Instruction Multiple Data) capabilities that MMX and SSE technology delivered in the older Pentiums. What this means in layman's terms is a reduction in the number of instructions required to execute a particular program, which in turn

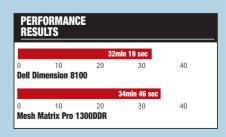
increases overall performance. However, since a number of today's applications, our tests included, have not been coded to take advantage of SSE2, we have seen little evidence to substantiate these multimedia performance boosts.

Putting this technology to the test we decided to run a mini benchmark to assess the efficiency of the Pentium 4's new instruction set, in comparison to an AMD Athlon. We selected two similarly specced machines from this month's group test: the Mesh Matrix Pro 1300DDR, sporting a 1.33GHz Athlon with 256MB of PC2100 memory, and the Dell Dimension 8100, with its 1.5GHz Pentium 4 and 256MB of RDRAM. We then ripped a DVD movie to the hard disk on each system, and installed the FlaskMPEG (http://go.to/flask mpeg) video conversion utility that has been encoded with MMX, 3Dnow and, significantly, SSE2 optimisations. Using this we converted the DVD files into DivX format, which translates the movie files from MPEG-2 into MPEG-4, and the audio track from AC3 to MP3. The time it took to complete this on each machine was recorded.

The verdict

Looking at the results, there is indeed a time difference of approximately two minutes 30 seconds in favour of the Pentium 4 system. However, it should be noted that the Mesh system actually achieved a much higher overall SYSmark 2000 score. Whether this is significant for the end user really depends on how they use their PC, as well as the availability of appropriately coded software.

Nevertheless, this simple test could indicate that Intel has got something to work with, especially in an age where convergence technologies are being driven forward. What remains now is to see how an equally clocked Athlon processor measures up.



PCW :: JULY 2001

Multivision Vision RAID 4500

PRICE £1,761.33 (£1,499 ex VAT) CONTACT Multivision 0870 066 0885

PROS Audio; RAID; FireWire; USB ports CONS No room for expansion; not the fastest

OVERALL Full of features that should stand the test of time and keep enthusiasts happy

FEATURES PERFORMANCE VALUE FOR MONEY PERFORMANCE VALUE FOR MONEY PERFORMANCE VALUE V

This Multivision offering includes a RAID controller card connected to two 30GB Western Digital hard drives in a RAID Level 0 configuration. This means that data is split across the drives and read and written to both simultaneously, resulting in a higher data throughput. However, if one disk were to fail, all data would be lost.

If this plays on your mind, you could make backups with the Mirai CD-RW. This can write at 16-speed and rewrite at 10-speed. It also features BurnProof technology that prevents buffer underrun, so you can work as you burn. A slotted 16-speed DVD-drive is also included, leaving two 5.25in bays available.

As for the nerve centre, an AMD Athlon, clocked at 1.33GHz and backed up by 256MB of PC2100 SDRAM, provides the system with the processing power to mix it with the rest. In addition, the memory comes on one stick, leaving two DIMM slots free on the Gigabyte GA-7VTX.

This motherboard employs VIA's Apollo KT266 chipset that supports UltraDMA100 drives and offers an extra four USB ports via two internal cables. Residing in the AGP Pro slot is a 64MB Hercules 3D Prophet 4500. This is based on ST Microelectronics' Kyro II chipset and offers a powerful alternative to an nVidia-dominated arena. There's a 19in Hitachi monitor with a flat-faced shadow-mask tube that displays a decent picture.

Two other products from Hercules are included: a DV Action FireWire board with three external and one internal IEEE1394 ports, and a Game Theatre XP sound card that links up with a rack offering Dolby Digital decoding, perfect for the VideoLogic DigiTheatre LC speaker set. Furthermore, four USB ports, optical and coaxial digital ports, a mic jack and MIDI-In/Out DIN connectors are present.

Finally, a copy of Lotus SmartSuite Millennium completes a package that takes a Highly Commended award.



NEC Direct Powermate Select XL3

PRICE £1,761.33 (£1,499 ex VAT) CONTACT NEC Direct 0870 010 6328

PROS DVD-R/CD-RW combo; Office SBE; warranty CONS Not the fastest; display set OVERALL A slightly unbalanced system, but one with some great, original features

FEATURES PERFORMANCE PERFORMANCE

VALUE FOR MONEY OVERALL OVERALL

NEC walked away with a Highly Commended award in last month's group test, and this time it has submitted yet another impressive machine.

Like many other systems on test, the NEC is based on a 1.33GHz AMD Athlon processor, along with 256MB of PC2100 DDR SDRAM. Unlike some machines, the NEC has its 256MB of RAM on a single DIMM, leaving another slot free for future upgrades.

Even the most space-hungry user will be happy with the hard drive that NEC has supplied. The Quantum Fireball drive sports a massive 60GB of storage, but the hard drive isn't the most impressive storage device in this system. Sitting in one of the 5.25in bays is a Pioneer DVD-R/CD-RW combo drive that will read DVDs and CDs, and write CD-R, CD-RW and DVD-R discs. The beauty of DVD-R is that it can be read on any DVD device, even DVD-Video players.

What's most impressive is that the last time we looked at a DVD-R drive

it cost over £3,000, so this is a great addition to any PC. NEC has even included a 16-speed Pioneer DVD-ROM drive for disc-to-disc copying.

Letting the specification down slightly is a 32MB GeForce2 GTS graphics card, which has been superseded by the GeForce2 Ultra and the GeForce3 chipsets.

Unfortunately, the 19in NEC VR19 monitor is not the best we've seen. It's especially disappointing when you consider that the Intellect shipped with a far superior monitor from NEC. The VR19 is a shadow-mask unit with a noticeably curved screen, although the image is sharp.

Also included is a SoundBlaster Live! Value sound card and a set of Labtec LCS-2514 speakers. This is fine for surround sound on games, but not for Dolby Digital playback on DVD movies.

Rounding things off is a 56K modem, a copy of MS Office SBE and a three-year, on-site warranty.

164 JULY 2001 :: PCW

Panrix Magnum 1333 Turbo

PRICE £1,761.33 (£1,499 ex VAT) CONTACT Panrix 0113 244 4958

PROS Powerful PC; graphics and sound; USB networking **CONS** Monitor; slower CD-RW

OVERALL Respectable, quick, with interesting features; let down by uninspiring monitor

FEATURES PERFORMANCE VALUE FOR MONEY PERFORMANCE VALUE FOR MONEY PERFORMANCE P

The Panrix Magnum 1333 Turbo is another machine to feature AMD's 1.33GHz Athlon processor. The CPU resides in an MSI K7T266 Pro motherboard and is backed up with 256MB of PC2100 memory.

The Magnum 1333 Turbo managed to power its way to third place in our SYSmark tests. With two DIMM slots free, it has room for additional memory. A modest 30GB Ultra-DMA100 Maxtor hard disk provides the primary means of storage, alongside a CD-RW from Samsung that can write and rewrite at eight-speed. A 16-speed Pioneer DVD-ROM drive is also included, leaving one vacant 5.25in bay.

Internet connection is catered for by a Diamond SupraExpress 56i Pro PCI modem. Occupying another PCI slot is Creative's SoundBlaster Live! 5.1 audio card that, when married to the set of DTT2200 loudspeakers from Cambridge Soundworks, offers full Dolby Digital surround sound. Inside the screwless case are two dedicated PCI slots left free for other devices, while another is shared with the CNR slot. A backing plate with two additional USB slots is also provided. A USB PC-to-PC onboard network controller also allows you to network two PCs over the supplied USB cable.

Panrix has squeezed in a graphics card based on nVidia's GeForce3 chipset. Like most other cards, the Leadtek design sports 64MB of DDR SDRAM, but also comes with DVI and S-Video connectors.

The Panrix system scores well in our 3D tests. Plugged into the D-SUB output of the Leadtek card is a Hansol 910A monitor. This 19in model produces a reasonably focused picture at resolutions of up to 1,600 x 1,200 at 85Hz. However, the screen is a bit reflective and the rotary dial control is awkward to use.

A copy of MS Works Suite 2000 completes this well-rounded system, and helps it win an award.



Polar Panache 1200

PRICE £1,762.50 (£1,500 ex VAT) CONTACT Polar 0800 138 1238

PROS EIDE RAID configuration; heatsink CONS Graphics card; no sound card

OVERALL A disappointing system. There are much better packages on offer

FEATURES PERFORMANCE

VALUE FOR MONEY OVERALL

Polar has gone for an AMD solution, but instead of a 1.33GHz Athlon, the Panache sports a 1.2GHz chip. Unfortunately, the slower chip has affected the Polar's performance.

Supporting the CPU is 256MB of PC2100 DDR SDRAM, but Polar has supplied two 128MB DIMMs, so there's no way of upgrading without discarding what you already have.

The most impressive part of this system is the huge circular heatsink covering the CPU. It doesn't do anything special, but it looks great.

The Asus A7M266 motherboard supports two extra USB ports, which Polar has thoughtfully located in an unused backing plate.

A slightly aging nVidia GeForce2 GTS graphics card fills the AGP slot. Although this card can deal with any 3D game you throw at it, it doesn't have the future-proofing of the GeForce3 cards supplied elsewhere.

An liyama S900MT 19in monitor displays the image and does a fairly

good job, considering this is one of liyama's budget models. The tube is a shadow-mask unit and the screen is curved, but the image is sharp across the whole surface.

Only two of the five PCI slots are filled, one with a 56K modem and the other with a Promise FastTrack EIDE RAID controller. The latter controls the two 20GB IBM Deskstar hard disks configured in RAID 0 for optimum performance. This means the system sees both drives as one; it reads from and writes to them simultaneously.

The top two 5.25in bays are occupied by a 12-speed DVD-ROM drive and a CD-RW drive, both from Samsung. There's no sound card, which is disappointing considering the price. Also disappointing are the Labtec LCW-1070 speakers that consist of just two satellites with no sub-woofer.

Ultimately, Polar has produced a machine with some decent features, but as a whole it's eclipsed by the far stronger competition.

PCW :: JULY 2001 167

Poweroid.com 3010

PRICE £1,709.63 (£1,455 ex VAT) CONTACT Poweroid 0870 220 0444

PROS Quality monitor; RAID 0 array; sound system CONS Slower 3D; older graphics card

OVERALL An admirable showing from Poweroid, but not as feature-rich as others

FEATURES PERFORMANCE VALUE FOR MONEY VALUE FOR MONEY VALUE FOR MONEY VALUE VAL

Poweroid.com has powered its system with a 1.33GHz Athlon. However, the Asus A7V133 motherboard does not support DDR memory, and mounted in one of three DIMM slots is 256MB of PC133 memory.

Performance is improved thanks to the PCI RAID controller card hooked up to two IBM 40.1GB hard drives, providing enough storage to see you through the next few years.

For making removable backups, Poweroid.com supplies a BurnProof Plextor CD-RW capable of writing at 12-speed and rewriting at 10-speed. The 16-speed DVD-ROM drive makes watching DVDs a possibility, but CD-to-CD copying would benefit if the two optical drives were each connected separately to one of A7V133's four EIDE connectors.

Sitting in the AGP slot is a 32MB 3D Blaster GeForce2 GTS card that, as the name suggests, utilises nVidia's GeForce2 GTS chipset. Disappointingly, this card is outclassed by those

with 64MB of video memory, faster GPU cores and more connectors, as this only comes with a D-SUB port.

Hooked up to the graphics card is an liyama Vision Master Pro 451 monitor that uses a 19in Diamondtron NF tube to great effect. The image is bright and well focused, making it a pleasure to use at the typical resolution of 1,280 x 1,024. There are two D-SUB connectors and a USB hub, with one upstream and four downstream ports.

A SoundBlaster Live! 5.1 audio card and a set of DTT2200 speakers ensure Dolby Digital surround sound, while another two USB ports can be found on a backing plate. For upgrading, you are left with two dedicated PCI slots free and one of each bay size for other drives.

Lotus SmartSuite Millennium is the office suite of choice, which means you can start working straight away. Overall, a capable system but behind the front runners in terms of features.



Systemax A1300RV Lifestyle

PRICE £1,761.33 (£1,499 ex VAT) CONTACT Systemax 08707 297 366

 $\textbf{PROS} \ \, \text{Monitor; large hard disk; 256MB DIMM } \textbf{CONS} \ \, \text{Graphics card; warranty}$

OVERALL A solid package, but Compute IT and Multivision offer more for the money

FEATURES PERFORMANCE

VALUE FOR MONEY OVERALL OVERALL

Systemax has always managed to produce first-rate systems while keeping costs down. Unfortunately, the A1300RV Lifestyle 0780 only comes with a one-year, on-site warranty. That aside, Systemax has put together another solid machine.

Unsurprisingly, at the heart of the machine is a 1.33GHz AMD Athlon supported by 256MB of PC2100 DDR SDRAM. The memory comes on a single DIMM, so you've still got one spare for future upgrades. The inside of the case is fairly tidy and there are single 5.25in and 3.5in bays free.

Filling the top two 5.25in bays are a 52-speed CD-ROM drive and a Ricoh DVD/CD-RW combo drive. Although you can still perform discto-disc copies, we'd have preferred a DVD-ROM and a CD-RW. That said, the Ricoh combo unit is a good one.

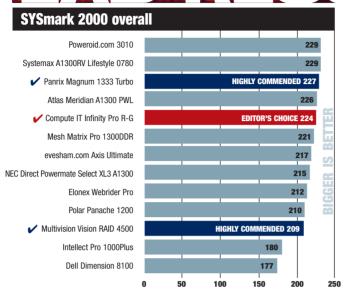
The display set is a mixed bag. The 19in CTX monitor is a fine example, sporting a Sony FD Trinitron tube. The picture is bright and well focused, and the OSD is fairly intuitive. Feeding the monitor is an nVidia GeForce2 Pro graphics card that can't really compete with the GeForce3 cards when it comes to 3D. However, the Systemax did manage to top the chart in the 2D SYSmark test.

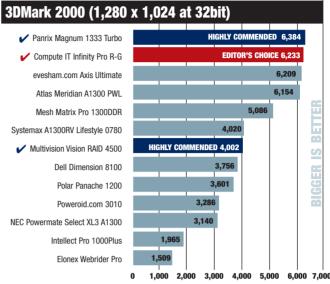
Sound is well taken care of with a Creative SoundBlaster Surround 5.1 retail bundle. This consists of a SoundBlaster Live! 5.1 and a set of Desktop Theatre 2200 speakers, providing excellent effects for both games and DVD movies. The only other expansion card is a 56K modem, leaving three PCI slots free.

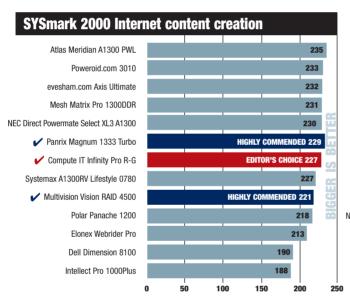
Systemax has supplied a 60GB Maxtor hard disk, which should please even the most space-hungry user. There's a Microsoft Intellieye mouse and Internet keyboard, as well as an MS Sidewinder gamepad and Lotus SmartSuite Millennium.

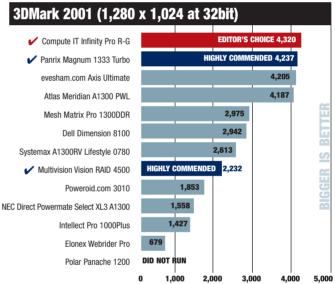
The Systemax is a good machine, but it's not good enough to grab an award this month.

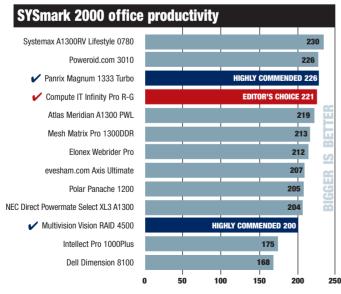
AB RESULTS

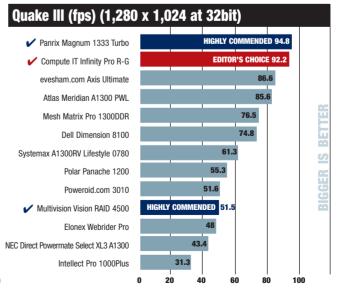












Please see page 62 for an explanation of how we tested the PCs

TABLE OF FEATURES

		Choice					
MANUFACTURER	ATLAS	COMPUTE IT	DELL	ELONEX	EVESHAM.COM	INTELLECT COMPUTERS	
MODEL NAME	MERIDIAN	INFINITY PRO R-G	DIMENSION 8100	WEBRIDER PRO	AXIS ULTIMATE	PRO 1000PLUS	
	A1300 PWL						
Price inc VAT (ex VAT)	£1,761.33 (£1,499)	£1,761.33 (£1,499)	£1,585.07 (£1,349)	£1,761.33 (£1,499)	£1,761.33 (£1,499)	£1,761.33 (£1,499)	
Telephone	020 8532 6515	08707 487 487	0870 907 5664	020 8452 4444	08707 287 070	0161 429 9911	
URL	www.atlasplc.com	www.it-pc.co.uk	www.dell.co.uk	www.elonex.co.uk	www.evesham.com	www.intellect.uk.com	
HARDWARE SPECS							
Processor	AMD Athlon 1.33GHz	AMD Athlon 1.33GHz	Intel Pentium 4 1.5GHz	AMD Athlon 1.3GHz	AMD Athlon 1.33GHz	Intel Pentium III 1GHz	
RAM/type	128MB/PC2100	256MB/PC133	256MB/RDRAM	256MB/PC133	256MB/PC2100	256MB/PC2100	
Occupied/spare RAM slots	1/1	2/2	2/4	1/2	1/1	1/3	
Max memory in this configuration	640MB	1.28GB	1GB	1.28GB	768MB	1.8GB	
Max mem supported by m'board	2GB	1.5GB	1GB	1.5GB	2GB	4GB	
Hard disk (manufacturer/model)	Quantum Fireball Plus AS	IBM Deskstar DTLA-307030	Maxtor 5T040H4	Fujitsu MPG3409AH	Maxtor 5T040H4	IBM Deskstar DTLA-307030	
HD size/interface	60GB/EIDE	2 x 30.7GB/EIDE (RAID 0 ctlr)	40GB/EIDE	40GB/EIDE	40GB/EIDE	30.7GB/EIDE	
Storage drive	LG CED 8120-BB	Plextor PX-W1610A	Samsung SM-308B	Acer 1280A CD-RW	Teac CD-W512E	Mirai CRD-BP1400P	
manufacturer/model	(12x 8x 32x)	BurnProof (16x 10x 40x)	(8x 4x 32x DVD 8x)	(12x 8x 32x)	(12x 10x 32x)	(BurnProof) (16x 10x 40x)	
Size of storage drive/interface	650MB/EIDE	650MB/EIDE	650MB/EIDE	650MB/EIDE	650MB/EIDE	650MB/EIDE	
MOTHERBOARD COMPO	NENTS						
Motherboard manufacturer	Asus	EPoX	Dell Custom	MSI	Asus	Gigabyte	
Model/chipset	A7M266/AMD-761/VIA 686B	EP-8KTA3+/VIA KT133A	Dell/Intel 850	K7T Pro2/VIA KT133A	A7M266/AMD-761 & VIA 686B	GA-6RX/VIA Pro266	
EXPANSION AND I/O							
No of 3.5/5.25in bays	3/4	8/5	3/3	4/3	3/3	4/3	
No of free 3.5/5.25in bays	2/1	5/2	1/2	2/1	1/1	2/1	
No of PCI/ISA/shared/AMR slots	4/0/1/0	5/0/1/0	5/0/0/0	5/0/1/0	4/0/1/0	5/0/0/1	
Free PCI/ISA/shared/AMR slots	2/0/0/0	1/0/1/0	3/0/0/0	4/0/0/0	2/0/1/0	4/0/0/1	
No of USB/serial/parallel/PS/2	4/2/1/2	4/2/1/2	4/1/1/2	2/2/1/2	4/2/1/2	2/2/1/2	
MULTIMEDIA							
DVD manufacturer/model	LG/DRD8160-BB	Pioneer/DVD-105s	Samsung/SM-308B (as above)	Panasonic/SR-8586	Pioneer/DVD-116	Panasonic/SR-8586B	
DVD speed/interface	16x/EIDE	16x/EIDE	8x/EIDE	16x/EIDE	16x/EIDE	16x/EIDE	
Sound card manufacturer	Creative	Creative	Turtle Beach	Creative	Creative	Creative	
Sound card model	SoundBlaster Live! 5.1	SoundBlaster Live! Platinum 5.1	Santa Cruz	SoundBlaster Live! 5.1	SoundBlaster Live! 5.1	CT5880 (onboard)	
Speakers (manufacturer/model)	Cambridge Soundworks	Cambridge Soundworks	Harmon Kardon 695	Cambridge Soundworks	Cambridge Soundworks	Cambridge Soundworks	
	Desktop Theatre 5.1 DTT2200	Desktop Theatre 5.1 DTT2200		PCWorks FourPointSurround	Desktop Theatre 5.1 DTT2200	SW310	
Graphics card manufacturer/model	nVidia GeForce3	Leadtek WinFast GeForce3	nVidia GeForce2 Ultra	nVidia GeForce2 Ultra	nVidia GeForce3	Hercules 3D Prophet II MX	
Chipset	nVidia GeForce3	nVidia GeForce3	nVidia GeForce2 Ultra	nVidia GeForce2 Ultra	nVidia GeForce3	nVidia GeForce2 MX	
Memory and type	64MB DDR SDRAM	64MB DDR SDRAM	64MB DDR SDRAM	64MB DDR SDRAM	64MB DDR SDRAM	64MB SDRAM	
Graphics card interface	AGP	AGP	AGP	AGP	AGP	AGP	
Monitor manufacturer/model	CTX PR960F	NEC MultiSync 95E	Dell M991	livama Vision Master 452	Mitushishi Diamond Plus 92	NEC MultiSync FE950+	

CTX PR960F NEC MultiSync 95F Dell M991 liyama Vision Master 452 Mitusbishi Diamond Plus 92 NEC MultiSync FE950+ Monitor manufacturer/model Monitor size/max viewable diag 19in/18in 19in/18in 19in/18in 19in/18in 19in/18in 19in/18in Max resolution at VESA refresh 1,600 x 1,200 at 75Hz **OTHER INFORMATION** Allied Data Internal Conexant HCF Lucent Win Modem Diamond SupraSST Modem manufacturer and model CNR modem (V.90, PCI) Zoom Model 3025 (standard, interface) (V.90, PCI) Speakerphone, (V.90, PCI) (V.90, PCI) 56i Pro DF (V.90, PCI) (V.92, PCI) ProLink TV-tuner, FireWire card N/A N/A N/A N/A Misc hardware Logitech QuickCam Express (3 external & 1 internal ports) Microsoft Works Suite 2001 Lotus SmartSuite Millennium Microsoft Works Suite 2000 Microsoft Office 2000 Premium Lotus SmartSuite Millennium Microsoft Office 2000 SBE Bundled software Warranty (RTB = return to base, 1yr on-site, 2yrs RTB 3yrs RTB 1yr on-site, 2yrs C&R 2yrs on-site, 1yr RTB 3yrs on-site 3yrs on-site C&R = collect and return)



		OCN.		OCIN			
		Gummendy Commender		Gummendy Commender			
	MESH	MULTIVISION	NEC DIRECT	PANRIX	POLAR	POWEROID.COM	SYSTEMAX
	MATRIX PRO	VISION RAID	POWERMATE	MAGNUM 1333	PANACHE 1200	3010	A1300RV
	1300DDR	4500	SELECT XL3 A1300	TURBO			LIFESTYLE 0780
	£1,761.33 (£1,499)	£1,761.33 (£1,499)	£1,761.33 (£1,499)	£1,761.33 (£1,499)	£1,762.50 (£1,500)	£1,709.63 (£1,455)	£1,761.33 (£1,499)
	020 8208 4706	0870 066 0885	0870 010 6328	0113 244 4958	0800 138 1238	0870 220 0444	08707 297 366
	www.meshcomputers.com	www.multivision.co.uk	www.nec-online.co.uk	www.panrix.com	www.polartechnology.com	www.poweroid.com	www.systemaxpc.co.uk
	AMD Athlon 1.33GHz	AMD Athlon 1.33GHz	AMD Athlon 1.33GHz	AMD Athlon 1.33GHz	AMD Athlon 1.2GHz	AMD Athlon 1.33GHz	AMD Athlon 1.33GHz
	256MB/PC2100	256MB/PC2100	256MB/PC2100	256MB/PC2100	256MB/PC2100	256MB/PC133	256MB/PC2100
	2/0 (DDR DIMM slots), 0/3 (SDR DIMM slots)	1/2	1/1	1/2	2/0	1/2	1/1
	256MB	1.28GB	768MB	768MB	256MB	1.28GB	768MB
	2GB DDR or 3GB SDR	3GB	2GB	3GB	2GB	1.5GB	2GB
	Western Digital WD400BB	Western Digital WD300BB	Quantum Fireball Plus AS	Maxtor 5T030H3	IBM Deskstar DTLA-305020	IBM Deskstar 40.1GB	Maxtor 5T060H6
	40GB/EIDE	2 x 30GB/EIDE (RAID 0 ctrl card)	60GB/EIDE	30GB/EIDE	2 x 20.5GB/EIDE (RAID 0 ctrl)	2 x 40.1GB/EIDE (RAID 0 ctrl)	60GB/EIDE
	Teac CD-W512E	Mirai CRD-BP1400P	Pioneer DVR-103	Samsung SW-408B	Samsung SW-208B	PlextorPX-W1210A	Ricoh MP9120 DVD/CDRW
	(12x 10x 32x)	(BurnProof) (16x 10x 40x)	(8x 4x 2x DVD-R)	(8x 8x 32x)	(8x 4x 32x)	BurnProof (12x 10x 32x)	(12x 10x 32x DVD 8x)
-	650MB/EIDE	650MB/EIDE	650MB (4.7GB for DVD)/EIDE	650MB/FIDE	650MB/EIDE	650MB/EIDE	650MB/EIDE
	UJUIVID/ LIDE	OJOIVILY LIDE	030IVID (4.7 GD IOI DVD)/EDE	OJOIND/LIJL	UJUIVIE/ LIDE	UJUND/LIDL	OJUND/EDE
	Asus	Gigabyte	Gigabyte	MSI	Asus	Asus	Gigabyte
	A7A266/ALiMaGiK 1	GA7VTX/VIA KT266		K7T266 Pro(MSI-6380)/VIA KT266	***		GA-7DX/AMD-761 & VIA 686B
	ATAZOU/ALIVIQUIN	UM VIA VIA VIZ	UA-1 D// AINID-1 O IT VIA OCCU	N/ 1200 I TO(INIOI-0000)/ VIA IN E00	AT MEDUTANIDET OF A VIA 0000	M V I JU/ VIA IXI I JUA	UA-7 DA ANNID-7 OF G VIA 0000
	3/3	4/4	5/2	4/3	5/2	4/3	3/3
-	1/1	1/2	3/0	2/1	2/0	1/1	1/1
-	4/0/1/0	5/0/0/1	5/0/0/1	4/0/1/0	4/0/1/0	4/0/1/0	5/0/0/1
	1/0/1/0	1/0/0/1	3/0/0/1	2/0/1/0	3/0/0/0	2/0/0/0	3/0/0/1
-	4/2/1/2	6/2/1/2	3/0/0/1	4/2/1/2	4/2/1/2	4/2/1/2	2/2/1/2
	4/2/1/2	UZITZ	5/2/1/2	4/2/1/2	4121112	4121112	ZIZI IIZ
	Pioneer/DVD-115	Pioneer/DVD-105s	Pioneer/DVD-105	Pioneer/DVD-105s	Samsung/SD-612F	Pioneer/DVD-116	AOpen CD-952E/AKH, 52x CD-ROM
\rightarrow	16x/EIDE	16x/EIDE	16x/EIDE	16x/EIDE	12x/EIDE	16x/EIDE	8x/EIDE (Ricoh)
	Creative		Creative	Creative	C-Media	Creative	OX/EIDE (RICUII) Creative
		Hercules Game Theatre XP	SoundBlaster Live! Value	SoundBlaster Live! 5.1			
	SoundBlaster Live! 5.1				CMI-8738	Creative SoundBlaster Live! 5.1	
	Cambridge Soundworks	VideoLogic DigiTheatre LC	Labtec LCS-2514	Cambridge Soundworks	Labtec LCW-1070	Cambridge Soundworks	Creative Desktop Theatre
	Desktop Theatre 5.1 DTT2200	Line In OD Deschot 4500	Lastin Marant Carona CTC	Desktop Theatre 5.1 DTT2200	A AOD 1/7700 Duro	Desktop Theatre 5.1 DTT2200	5.1 DTT2200 (retail)
	Gainward GeForce2 Ultra	· ·	Leadtek WinFast GeForce2 GTS			Creative 3D Blaster GeForce2 GTS	
	nVidia GeForce2 Ultra	Kyro II	nVidia GeForce2 GTS	nVidia GeForce3	nVidia GeForce2 GTS	nVidia GeForce2 GTS	nVidia GeForce2 Pro
	64MB DDR SDRAM	64MB DDR SDRAM	32MB DDR SGRAM	64MB DDR SDRAM	64MB DDR SGRAM	32MB DDR SGRAM	64MB DDR SDRAM
	AGP	AGP	AGP	AGP	AGP	AGP	AGP
	Mitsubishi Diamond Pro 920	Hitachi CM771	NEC VR19	Hansol 910A	liyama S900MT	liyama Vision Master Pro 451	CTX PR960F
	19in/18in	19in/18in	19in/18in	19in/18in	19in/18in	19in/18in	19in/18in
	1,600 x 1,200 at 85Hz	1,600 x 1,200 at 75Hz	1,600 x 1,200 at 85Hz	1,600 x 1,200 at 85Hz	1,600 x 1,200 at 85Hz	1,600 x 1,200 at 75Hz	1,600 x 1,200 at 85Hz
			12.000				
	Etec 56K Voice Modem	Intel HaM Dat Fax Voice	Conexant SoftK56	Diamond SupraExpress	Diamond SupraSST	Haicom Internal	Conexant HCF (V.90, PCI)
	(V.90, PCI)	(V.90, PCI)	Data Fax (V.90, PCI)	56i Pro VCC (V.90, PCI)	56i Pro DF (V.90, PCI)	modem (V.90, PCI)	
	N/A	Hercules DV Action FireWire	N/A	N/A	Promise FastTrak100	Promise FastTrak100	Microsoft SideWinder
		card, 3ware RAID card			UltraDMA100 controller (RAID 0)	UltraDMA100 controller (RAID 0)	Game Pad Pro
	Microsoft Works Suite 2000	Lotus SmartSuite Millennium	Microsoft Office 2000 SBE	Microsoft Works Suite 2000	Lotus SmartSuite Millennium	Lotus SmartSuite Millennium	SmartSuite Millennium & games
	1yr on-site, 2yrs RTB	3yrs C&R	3yrs on-site	1yr on-site, 2yrs RTB	1yr on-site, 2yrs RTB	1yr C&R, 2yrs RTB	1yr on-site

PCW:: JULY 2001 171



Editor's Choice

rmed with a generous budget of £1,500 excluding VAT, this month's contenders had ample room to show what they could really do. The turnout was very impressive with most machines sporting top-of-the-range processors, graphics cards, 19in monitors, CD-RWs and sound systems that have the potential to reproduce cinema-like surround sound. Several of the machines even come with hard drives connected to RAID controllers for improved performance, while the appearance of a DVD-R drive marks the mainstream introduction of this new recording format. Sadly, the variety of components in many of the systems is not reflected in the choice of processor.

In a field dominated by AMD and its latest Athlon incarnation, Intel is only represented by two of its chips: a 1GHz Pentium III and a Pentium 4 clocked at 1.5GHz. However, processor speed is not the only issue to consider when it comes to choosing the winners. We wanted to see powerful graphics cards and a great balance of durable components, too. An office suite was also a prerequisite.

With all these factors in mind, several offerings nearly made the top slot. NEC Direct came close by bundling a Pioneer DVD-R drive and Microsoft Office 2000 Small Business Edition. This does not come cheap, so opting for the older 32MB GeForce2 graphics card, cheaper Creative sound card and Labtec speakers, along with a standard 19in monitor, made the savings.

The winners

The first to the podium to accept the **Editor's Choice** award is the **Compute IT Infinity Pro R-G**. Compute IT machines have been getting better and better over the past few months and this one hit the right combination. You get a full-sized tower case that houses a plethora of bits and bobs, as well as room for any future additions. A nifty 1.33GHz Athlon, along with 256MB of PC133 memory, provides the necessary power to make everyday applications run efficiently, while two 30.7GB IBM hard drives linked to the EPoX EP-8KTA3+'s onboard RAID controller offer high performance and enough storage for the most space-hungry users. A BurnProof Plextor CD-RW is one of the best

in the group test and ensures that you can work while writing.

If you're into gaming, watching DVD movies or just want to have the best PC on the block, then you won't be disappointed with the fully featured 64MB nVidia GeForce3. The 16-speed DVD-ROM drive, SoundBlaster Live! Platinum 5.1 sound card and DTT2200 speakers also offer rich audio and a home cinema setup. Just sit back and control those sound levels from the comfort of your armchair with the infra-red remote that comes with the Creative Live! Drive IR panel. A FireWire card is also included with three external ports and one internal, ideal for DV editing on the decent 19in NEC monitor. With a copy of Lotus SmartSuite Millennium, a cordless Logitech keyboard and wheel mouse, this is a very versatile PC.

Following closely behind is Multivision's Vision RAID 4500 which gets a Highly Commended award, It's a RAID machine, too, with two 30GB hard drives. It has the same processor as the Compute IT machine, but this time is backed up by PC2100 memory and plugged into a Gigabyte motherboard offering no fewer than six USB ports. There's a Burn-Proof CD-RW and a FireWire card with the same number of ports. The 64MB Kyro-II-based graphics board, coupled with the solid 19in Hitachi monitor, makes for a competent graphics solution and a refreshing change to the typical nVidia card/-Mitsubishi CRT solution. A superb audio setup in the shape of Hercules' excellent Game Theatre XP and VideoLogic's DigiTheatre LC speakers ensures that your eardrums will be impressively resonated. Another all-round PC that will keep you happy.

Choosing the winner of the second **Highly Commended** gong was a difficult decision, but we went for the **Panrix Magnum 1333 Turbo** on the basis that it's a super-quick machine in both 2D and 3D applications, thanks to the nVidia GeForce3-based graphics board, 1.33GHz AMD Athlon and 256MB of PC2100 memory. Audio is looked after well by Creative's SoundBlaster Live! 5.1 sound card and the set of DTT2200 loudspeakers from Cambridge Soundworks. We also liked the screwless case, and the way you can network two PCs using the motherboard's onboard USB network controller.

The Infinity Pro R-G offers rich audio and a home cinema setup



Panrix Magnum 1333 Turbo