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Value for money

It's surprising what you can get for less than £1,000 these days, even when you bundle in the operating system of the moment, Windows XP

When it comes to budget systems, we expect to see previous-generation components with features and performance scores below what you'd get if you were shelling out a cool thousand. But it may surprise you to hear that spending less than £1,000

inc VAT on a system does not make you a cheapskate. There's really no need to spend £1,500 on a system any more; components just don't cost that much these days. £799 ex VAT is no longer a 'budget' figure; you can easily find yourself with a fully equipped and well performing system at this price.

Aside from the product activation headaches Microsoft's new OS is suffering, the arrival of Windows XP has been met with much praise. The number of derogatory letters dropping into the *PCW* mailbox has been much lower than we were expecting. This is, we believe, because it really does make day-to-day running an easier, and therefore more pleasurable, experience for both the novice and the more experienced user. It's for this reason that we've made it the operating system of choice for this month's test.

The arrival of AMD's Athlon XP, the Creative Audigy sound card and Nvidia's Titanium Geforce graphics cards has not yet caused alternative component prices to drop as expected. There are therefore no 'cheaper alternatives' to pick from.

Granted, sacrifices have to be made when money is tight, but there's still a lot in these systems. Without doubt there is something here for everyone. ➤

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GROUP TEST £799 XP PCS

Dan Technology Apollo

PRICE £938.83 (£799 ex VAT) **CONTACT** Dan 020 8830 1100

PROS Reliable P4 architecture; fast CD-RW drive **CONS** Disappointing components

OVERALL Disappointing performance scores and uninspiring features

FEATURES ■■■■■ **PERFORMANCE** ■■■■■

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The only company to opt for an Intel processor this month has sadly produced the lowest overall system performance score. This 1.7GHz P4-based system sports a 256MB stick of PC133 SD-Ram, filling one of the three Dimm slots. This immediately hampers performance, as a Pentium 4 can only just about rival Athlon systems when using the infinitely superior RD-Ram. Thus it scores a mere 149 overall in Sysmark.

Maybe a better tactic would have been to opt for the excellent value Tualatin 1.2GHz Celeron and invest the remaining cash elsewhere. Sadly, though, the high cost of the Pentium 4 means that there is little else of any note to be seen here.

The Supermicro motherboard, which uses an Intel 845e chipset, has six PCI slots, two of which are filled. The first houses a Creative 128 sound card. This is now three years old, so we were surprised to see it included. Sound quality is the worst in the group test.

Graphics are handled by a Leadtek Winfast Geforce2 MX64, using a Geforce2 MX 200 chip, and featuring 64MB of memory. This is the most disappointing graphics card in the test, giving a 3DMark 2001 score of just 642, and 10.5 frames per second (fps) in Quake III: Team Arena. The monitor is a rebadged CTX VL700. Even as a standalone product, this would barely warrant its low price tag, as we were disappointed by its image quality.

On the plus side, storage options are level, if not superior to the rest of the systems on test. Maxtor's 40GB hard drive is fast and reliable, and the very fast Acer CD-RW drive writes at 20-speed. The LG DRD 8160B DVD drive reads at 16-speed.

Ultimately, this machine was brought down by the cost of the Pentium 4 processor. A cheaper chip would have left more money in the kitty to spend on some more impressive components.



Evesham Axis 1600+ 2TI

PRICE £938.83 (£799 ex VAT) **CONTACT** Evesham 08707 287 070

PROS Good 2D and 3D performance **CONS** No six-channel speakers

OVERALL An excellent system, sadly pipped to the post by some real high flyers

FEATURES ■■■■■ **PERFORMANCE** ■■■■■

VALUE FOR MONEY ■■■■■ **OVERALL** ■■■■■



This Evesham system sports a 1600+ Athlon XP processor coupled with a 256MB stick of PC2100 DDR SD-Ram. This is a familiar pairing, as is the use of a Via KT266 chipset motherboard, this one being manufactured by Gigabyte. System performance scores are high, as is expected with such a processor, giving an overall 169 in Sysmark 2001.

Two of the five PCI slots are filled, the first by the sound card, and the second by a modem. Sound was our major bugbear with this system. The use of Creative's Soundblaster Live 5.1 card is perfectly good for the price, even if another manufacturer has stretched to an Audigy. But the use of four-point surround speakers really lets this system down. That said, the FPS1600s is a far better looking set than its predecessors.

Evesham makes up for this with a Leadtek-badged Geforce2 TI graphics card. Featuring 64MB of memory, this chip is common in this

test, but in no way does this make its performance unimpressive, reaching 2,980 in 3DMark 2001; one of the highest scores in this test. It also achieved an excellent 53.2fps in Quake III: Team Arena. It features a high-quality Samsung 17in monitor, which is capable of a top resolution of 1,280 x 1,024.

Storage of all varieties is well catered for. The Maxtor DX 740X hard drive provides 40GB of space, and spins at 7,200rpm. Samsung supplies both optical drives, with the CD-RW writing at an ample 16-speed and the SD-616 DVD-Rom drive spinning at a speed to match.

Unfortunately, there's little else to this system, and the lack of a Firewire card so often found in systems these days, particularly from Evesham, is also disappointing.

In no way is this a bad system, but it does lack the sparkle that has set previous Evesham PCs apart from the crowd in previous months.

Ideal AMD Pluris 1500XP

PRICE £938.83 (£799 ex VAT) **CONTACT** Ideal 0870 748 1468

PROS Decent peripheral components **CONS** Slowest processor in the group test

OVERALL A solid system, but not a patch on the winners

FEATURES ■■■■■ **PERFORMANCE** ■■■■■

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Here we find a 1.33GHz Athlon processor housed in a Gigabyte GA-7DX motherboard. This is one of only two AMD-based systems to have opted for the Thunderbird Athlon as opposed to the new XP processor. However, the system performance is still very much acceptable, with a Sysmark score of 150.

A 256MB stick of PC133 SD-Ram fills one of the three Dimm slots. It is strange to see PC133 memory these days, due to the minimal difference in price between this and its Double Data Rate (DDR) counterpart.

Ideal has chosen ATI's Radeon 7200 card for graphics. Using what is now a very old chip, this card, although still quite competent, pales in comparison to more recent models. In 3DMark 2001, it scored 2,159 and gave a reasonable, if not astounding 31.4fps in Quake III: Team Arena. However, the native XP drivers installed on this PC originally would not run Open GL. After a simple driver

download everything went far more smoothly. With these new drivers, we also noticed a small increase in 3DMark 2001 performance, bringing the score up to 2,193.

Output is fed to a 17in LG Flatron 775FT monitor. Although not as good as the 795FT Plus, it is capable of a top resolution of 1,280 x 1,024.

At this price point, we really expect hard drives of 30GB and up, although it is curious to see a Quantum Fireball drive from a company now wholly owned by Maxtor. Cyberdrive supplies the optical storage, writing CD-RW discs at 16-speed. Rewriting is particularly impressive, and at 12-speed is the fastest we've seen. A DVD drive is also supplied, running at 16-speed.

Creative's Soundblaster Live 5.1 is still a good value sound card, and is coupled with Cambridge Soundworks' DTT 2200 six-channel speakers to make a superb Dolby Digital sound pairing.



Mesh Matrix XP 1700 Plus

PRICE £938.83 (£799 ex VAT) **CONTACT** Mesh 020 8208 4706

PROS Good all-round innards **CONS** Four-point speakers

OVERALL Impressive components let down by weak monitor and speakers

FEATURES ■■■■■ **PERFORMANCE** ■■■■■

VALUE FOR MONEY ■■■■■ **OVERALL** ■■■■■

This month, Mesh has produced a solid all-round system. It may lack anything remarkable, but it has all the features you would expect of a sub-£1,000 system.

Mesh is using an Athlon XP 1700+ processor, housed in an Asus A7A 266 motherboard using the Alimagic 1 chipset. Two 256MB sticks of PC2100 DDR SD-Ram fill two of the three Dimm slots. This system's overall Sysmark score was 175; the fastest score on test.

The Matrix XP 1700 Plus' innards are much neater than many of the others seen here. The AGP slot is filled by a Leadtek Geforce2 TI graphics card, which gave expectedly high results, in both 3DMark 2001, coming in at 3,002, and 74.4fps in Quake III: Team Arena. The Mitsubishi Diamond Pro 730 is a reasonable quality monitor, although not a patch on the LG 775FT seen elsewhere in this test. It is capable of a top resolution of 1,600 x 1,200.

The first PCI slot boasts Creative's Soundblaster Live 5.1 sound card. Beaten only by Creative's latest card, the Audigy, this remains one of the best value cards on the market.

Unfortunately, Mesh has supplied Cambridge Soundworks FPS1600 four-point speakers; the inclusion of a six-channel product would have earned this machine an Editor's Choice award.

Another PCI slot contains and Etec 56K modem and one more slot is filled by an extra two USB ports, bringing the total to four.

A 40GB hard drive from IBM means storage is well catered for, and the Teac 24-speed CD-RW is more than adequate. The 16-speed DVD-Rom drive is from Pioneer.

Mesh's recent adjustment to a three year on-site warranty adds to the system's value but, primarily due to the lack of six-channel speakers, it just misses out on winning the Editor's Choice.

Multivision Vision Choice 2TI

PRICE £938.83 (£799 ex VAT) **CONTACT** Multivision 0870 066 0885

PROS Excellent features **CONS** Surprisingly low performance scores

OVERALL A high-quality system that is let down by the monitor and low test results

FEATURES **PERFORMANCE**

VALUE FOR MONEY **OVERALL**

The Athlon XP 1700+ seems to be a very popular processor this month, appearing in the majority of systems. This Multivision houses its 1700+ on an MSI motherboard that uses Via's KT266A chipset, the new and improved revision of the common KT266. Multivision has also included 512MB of PC2100 DDR SD-Ram, which fills up two of the three Dimm slots on the board. Performance is quite disappointing compared to the other 1700+ PCs on test, scoring 158 overall in Sysmark.

Graphics are handled by a Gainward Geforce2 TI/500 card, using the new Titanium Geforce2 chip. The results were slightly disappointing, with an average score of 2,595 in 3DMark 2001, and just 23.9fps in Quake III: Team Arena. Sadly, NEC's Multisync 75F 17in monitor is weak in comparison to other monitors on test, principally due to the fact that it can only muster a maximum resolution of 1,600 x 1,200 at 75Hz.

Seagate supplies the hard drive, coming in at a pretty standard 40GB and spinning at 7,200rpm. The ultra-fast 24-speed read Mirai CD-RW drive caters for optical storage, a particularly impressive feature of this system. The DVD-Rom drive reads at 16-speed.

Multivision, like Mesh, has adopted compact EIDE cables to make the system's innards far neater. And for this we are very grateful, as there's a lot inside this system that could potentially clutter it up. Aside from all the basics, there's also a three-port Firewire card and an extra four USB ports occupying the two lower-most PCI bays, bringing the total number of USB ports up to six.

The familiar pairing of Creative's Soundblaster Live 5.1 sound card and Cambridge Soundworks' DTT 2200 six-channel speakers puts in another appearance and, regardless of their excellent value, it is impressive to see them in a budget system.



Panrix Titan XP-2

PRICE £938.83 (£799 ex VAT) **CONTACT** Panrix 0113 244 4958

PROS Great performance **CONS** Slightly weaker monitor

OVERALL Excellent components, features and performance let down by the monitor

FEATURES **PERFORMANCE**

VALUE FOR MONEY **OVERALL**

A vast improvement in Panrix's choice of case comes with some of the best components on test, and the highest performance scores.

This is the only system to contain an Athlon XP 1800+ processor. This 1.53GHz CPU is coupled with 256MB of PC2100 DDR SD-Ram, which is more than enough to power it along. Everything is set in an MSI Raid motherboard using Via's KT266A chipset. The fastest of the new Athlon processors has given us the second highest Sysmark results. At 173, it is a true powerhouse.

Also attached to the motherboard is a Leadtek graphics card, using Nvidia's Geforce2 TI chipset. Thanks to an extra boost from the XP 1800+ processor, it attains some of the highest 3D scores, giving 3,124 on 3DMark 2001 and 53.5fps in Quake III: Team Arena. However, this Iiyama monitor lets the system down, as image quality is weaker than many others on test.

It's good to see the Creative Soundblaster Live 5.1 sound card and Cambridge Soundworks DTT 2200 six-channel speakers make another appearance.

Maxtor's hard drive is slightly smaller than most on test, at 30GB. A Cyber Drive CD-RW writes at a super-fast 24-speed, and the Hitachi DVD-Rom drive reads at 16-speed.

What really surprised us was the inclusion of not only two extra USB ports, but also four USB 2.0 ports at the rear, though this does block access to two PCI slots.

The only other criticism we can throw at Panrix is the lack of a Firewire port. As Firewire is becoming a far more dominant form of external connection, we hope to see ports appearing in even the lowest-end systems. However, considering the quality of the components you are getting here, it's no surprise it could not be squeezed in to the £799 price tag.



Polar Predator 1400

PRICE £938.83 (£799 ex VAT) **CONTACT** Polar 0800 138 1238

PROS 19in monitor **CONS** Poor performance

OVERALL Interesting components but the system lacks decent performance results

FEATURES ■■■■■ **PERFORMANCE** ■■■■■

VALUE FOR MONEY ■■■■■ **OVERALL** ■■■■■

First things first; Polar is the only manufacturer to supply a 19in monitor, something that astounded us when it entered the labs. Granted, it is not one of the highest quality screens, but NEC-Mitsubishi's Multi-sync 95F is perfectly competent. This has inevitably led to quite heavy cut-backs throughout the rest of the system. However, the cost of an upgrade to a 19in monitor would be greater than upgrading those components that are below today's standards. Therefore, if screen size is important, this system should be near the top of the list.

Graphics is the first weak area. Geforce2 MX chipset cards can no longer compete in this market, as the performance scores of this example adequately prove. In 3DMark 2001, this Asus-branded model managed only 1,569, and just 25.3fps in Quake III: Team Arena. It's a shame the monitor's 19 inches could not have been put to better use.

The Santa Cruz Turtle Beach is average as far as sound cards go and, even though it is capable of six-channel sound, only FPS1600 four-point speakers are supplied.

On the plus side, storage options are of a higher quality. An IBM Deskstar hard drive gives 40GB of storage space, and the Mitsumi CR48X48TE is of high quality. The Hitachi GD-800 DVD drive reads at 16-speed.

The system's core is of interest, though mainly due to the enormity of the circular heatsink and fan combination supplied. Made by Thermaltek, the fan is huge and orange, and certainly stands out from the crowd. Behind it is an Athlon Thunderbird processor. Housed in an Asus A7V266 motherboard, using Via KT266 chipset, and backed by 256MB of PC2100 DDR SD-Ram, Sysmark results were slightly below average for the test, though still good enough for the typical user, at 155 overall.



Poweroid 3015

PRICE £938.83 (£799 ex VAT) **CONTACT** Poweroid 0870 220 0444

PROS Superb performance; Audigy card **CONS** Athlon Thunderbird processor

OVERALL Proof of what can be achieved through good architecture and careful building

FEATURES ■■■■■ **PERFORMANCE** ■■■■■

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Poweroid systems have disappointed of late, not cutting the silicon mustard as they used to. This system, however, is a triumphant return to form.

However, it isn't without its faults. The majority of manufacturers managed one of AMD's new Athlon XP processors; Poweroid did not. Its choice of a 1.4GHz Athlon, on paper at least, lets the side down, and is an obvious cost saver. However, overall system performance was surprisingly close to those of the XP processors, with a Sysmark score of 162. So this is more than forgiven considering the quality of the rest of the package. 256MB of PC2100 DDR SD-Ram takes up one of the four Dimm slots on the Abit KG7-Raid motherboard, which won our motherboard group test in the December 2001 issue.

An ample 40GB Maxtor hard drive is hooked up to this Raid board. A Samsung CD-RW writes at 16-speed and Toshiba's DM1612 DVD-Rom drive reads at 16-speed.

Although the Geforce2 Pro chip has been around for what seems like an age, and is technically less proficient than the Titanium chips in this test, Poweroid has squeezed some particularly impressive scores out of this model. In 3DMark 2001, it managed 2,084, and gained the second highest score overall in Quake III: Team Arena, with 59.2fps. This graphics power is shown through Iiyama's high-quality 17in Vision Master Pro 413, capable of a top resolution of 1,600 x 1,200.

What really impressed us with this system is Creative's Audigy sound card. Far superior to its predecessor, the Soundblaster Live 5.1, it also has the added bonus of a Firewire port. A set of Cambridge Soundworks DTT 2200 six-channel speakers rounds the system off nicely.

It may not be much of a looker, but this system contains some top-quality components and gives superb performance scores.

Systemax A1700FW

PRICE £938.83 (£799 ex VAT) **CONTACT** Systemax 0870 297 366

PROS Great graphics **CONS** Poor monitor

OVERALL It's not without its faults, but this Systemax model is a well-featured performer

FEATURES ■■■■■ **PERFORMANCE** ■■■■■

VALUE FOR MONEY ■■■■■ **OVERALL** ■■■■■

Systemax has opted for AMD's Athlon XP 1700+ processor with a 256MB stick of PC2100 DDR SD-Ram. This is in no way remarkable, as most manufacturers have opted for the same configuration, but there's enough here to set it apart from the rest.

The memory and processor reside in an MSI motherboard with a Via KT266 chipset, which keeps two Dimm slots free. There are five PCI slots present, three of which are filled.

The first houses a Creative Soundblaster Live 5.1 sound card which is still a great value Dolby Digital card. This is coupled to Cambridge Soundworks DTT 2200 six-channel speakers. The next PCI slot down holds a Conexant 56K modem, and an ATI TV tuner card fills the third.

The Geforce2 Pro may be an aging chip, but its performance in this test shows it's not dead yet. This model, appearing on a graphics card from Gainward, gave an impressive score

of 2,964 in 3DMark 2001, and 53.3fps in Quake III: Team Arena. The choice of monitor is quite disappointing though, as the image quality of the CTX Executive Flat 710F is quite weak in comparison to others on test. However, this 17in monitor can muster a maximum resolution of 1,600 x 1,200.

An IBM Deskstar hard drive gives us 40GB to play with; an amount we'd expect from a system at this price. Samsung supplies both optical drives. Its SW-216B CD-RW drive writes at 16-speed, and the SD-616F DVD-Rom drive reads at 16-speed.

Overall system performance is very good, although not top of the field. Its score in Sysmark 2001 was 163 overall; similar to many Athlon XP 1700+ systems in this test.

Although the poor monitor and lack of Firewire port are disappointing, there are still some excellent components here, and performance is very good.



Time Machine 1700+ VQ Flex

PRICE £938.83 (£799 ex VAT) **CONTACT** Time 0870 830 3116

PROS Second highest performer **CONS** Poor graphics

OVERALL Excellent performance and some great features let down by weak graphics

FEATURES ■■■■■ **PERFORMANCE** ■■■■■

VALUE FOR MONEY ■■■■■ **OVERALL** ■■■■■

This impressive showing from Time is unfortunately let down on the graphics side in comparison to others in this month's test. However, there are some particularly good features in here.

An Athlon XP 1700+ processor sits on a Gigabyte GA-7DX motherboard. This is coupled with 256MB of PC2100 DDR SD-Ram, leaving just one Dimm slot free.

Filling the AGP slot is a 64MB Geforce2 MX card from MSI, the MS-8826. The inclusion of an MX card is pretty disappointing, regardless of the system's low price point, and scores are equally disappointing, with 1,646 in 3DMark 2001. Low even for an MX, Quake III was just as poor at 25.4fps. The LG Flatron 775FT is a perfectly good monitor to display these graphics, and capable of a top resolution of 1,280 x 1,024.

Two of the five PCI slots on the motherboard are filled. The first is home to a 56K modem from HSP. To

Time's credit, it has included a Firewire card in the second filled PCI slot. Sadly, a sound card is notably lacking; Time has chosen to use Gigabyte's onboard sound. The use of Creative FPS1600 four-point surround speakers is also disappointing.

An extra two USB ports, as well as the two already on the motherboard are included just above the graphics card, leaving three PCI slots free.

40GB worth of hard drive storage space comes from Seagate, spinning at 7,200rpm. LG supplies the optical storage drive, which writes at 16-speed, and Toshiba's DVD-Rom drive runs at 16-speed, too.

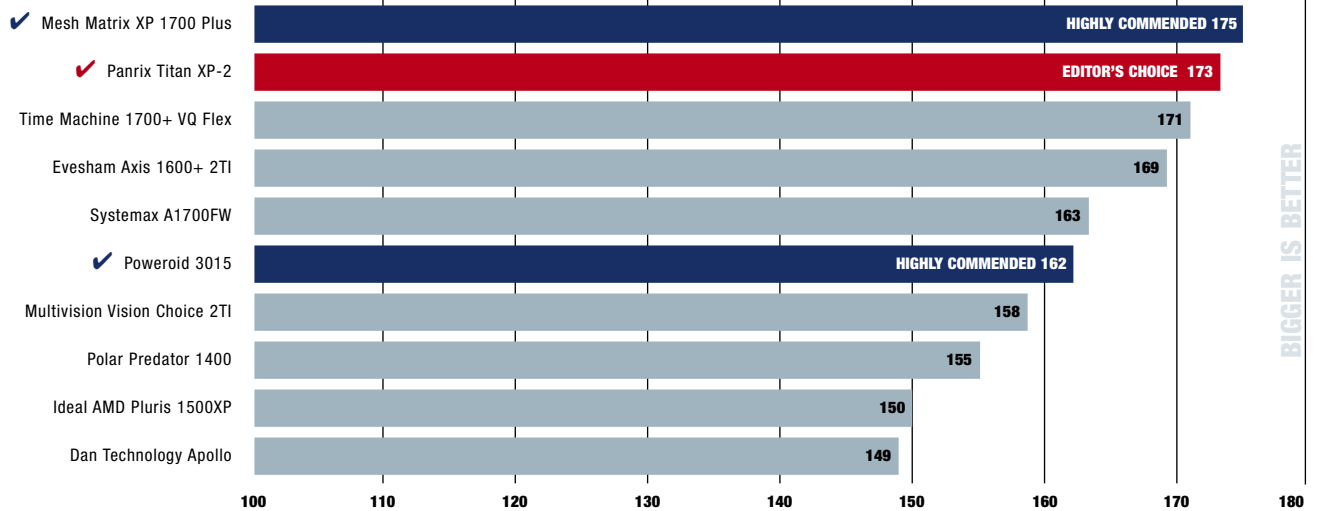
Aside from games and application bundles, Time has also included a PC joystick and gamepad.

Sysmark performance is very impressive, with this PC coming third from top in the test – an overall score of 171. However, the lack of decent graphics and sound capabilities lets this system down.

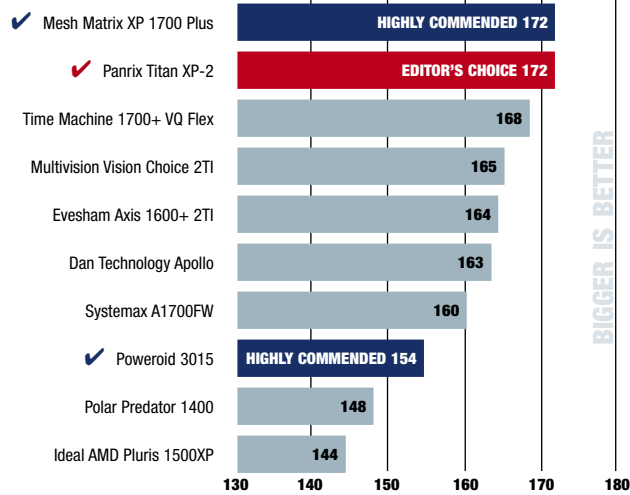


LAB RESULTS

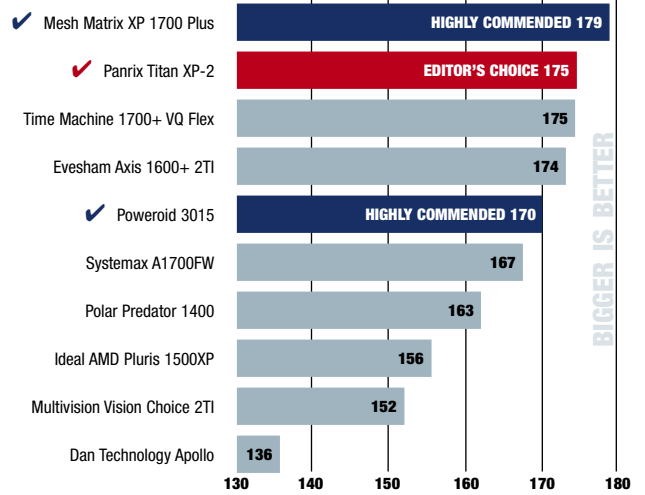
Sysmark 2001 overall



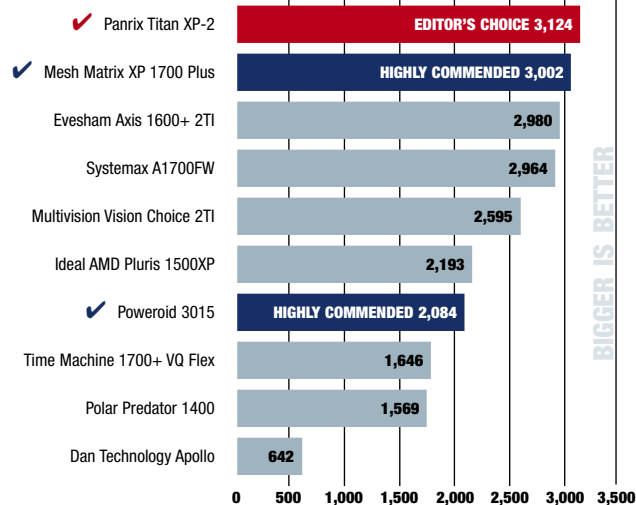
Sysmark 2001 Internet content creation



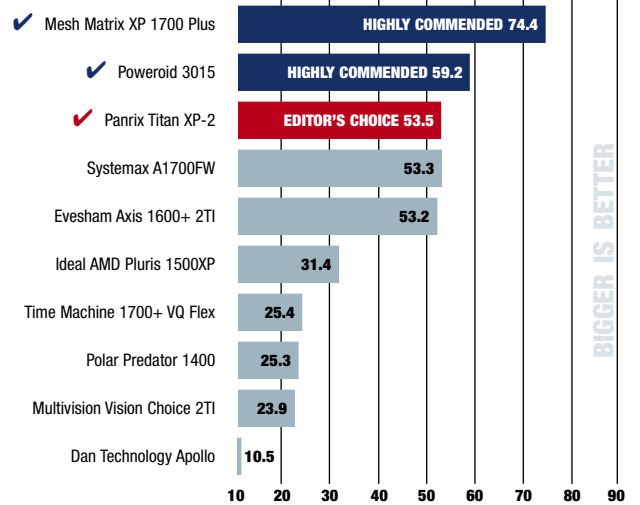
Sysmark 2001 office productivity



3DMark 2001 (1,280 x 1,024 at 32bit)



Quake III Team Arena (fps) (1,280 x 1,024 at 32bit)



Please see page 48 for an explanation of how we tested the PCs

TABLE OF FEATURES



MANUFACTURER	DAN TECHNOLOGY	EVESHAM	IDEAL	MESH
MODEL NAME	APOLLO	AXIS 1600+ 2TI	AMD PLURIS 1500XP	MATRIX XP 1700 PLUS
Price inc VAT (ex VAT)	£938.83 (£799)	£938.83 (£799)	£938.83 (£799)	£938.83 (£799)
Sales telephone	020 8830 1100	08701 609 500	08707 481 468	020 8208 4706
URL	www.dantechnology.com	www.evesham.com	www.ideal-computing.co.uk	www.meshcomputers.com
HARDWARE SPECS				
Processor	Intel Pentium 4 1.7GHz	AMD Athlon XP 1600+	AMD Athlon XP 1500+	AMD Athlon XP 1700+
Ram/type	256MB PC133 SD-Ram	256MB PC2100 DDR SD-Ram	256MB PC133 SD-Ram	512MB PC2100 DDR SD-Ram
Occupied Ram slots/spare Ram slots	1/2	1/2	1/2	2/1
Max memory in this configuration	768MB	768MB	768MB	1.7GB
Maximum memory supported by motherboard	1.5GB	1.5GB	1.5GB	2GB
Hard disk (manufacturer, model and spin speed)	Maxtor Viper 7,200rpm	Maxtor Viper 7,200rpm	Quantum, Fireball AS	IBM Deskstar 7,200rpm
Hard disk size/interface (UltraDMA66/100 or SCSI)	40GB/UltraDMA100	40GB/UltraDMA100	30GB/UltraDMA100	40GB UltraDMA100 EIDE
Storage drive manufacturer and model	Acer 20x 10x 40x	Samsung 16x 10x 32x	Cyberdrive CW308D	Teac CD-W524E 24x 10x 40x
MOTHERBOARD COMPONENTS				
Motherboard manufacturer	Supermicro	Gigabyte	Gigabyte	Asus
Model/chipset	P4SBA/Intel 845e	GA-7VTX/Via KT266	GA-7DX Raid/AMD761 and Via 686B	A7A 266/Alimagic 1
EXPANSION AND I/O				
No of 3.5/5.25in bays	3/3	3/2	3/3	3/3
No of free 3.5/5.25in bays	2/1	1/1	1/1	2/1
No of PCI/ISA/shared/AMR slots	6/0/0/1	5/0/0/1	6/0/1/1	5/0/1/1
No of free PCI/ISA/shared/AMR slots	4/0/0/1	3/0/0/1	4/0/1/1	1/0/1/1
No of USB/serial/parallel/PS/2	2/2/1/2	2/2/1/2	2/2/1/2	4/2/1/1
MULTIMEDIA				
DVD manufacturer/model	LG DRD 8160B	Samsung SD-616	Ideal	Pioneer DVD-116
DVD speed/interface	16x/EIDE	16x/EIDE	16x/EIDE	16x/EIDE
Sound card manufacturer	Creative	Creative	Creative	Creative
Sound card model	Soundblaster PCI128	Soundblaster Live 5.1	Soundblaster Live 5.1	Soundblaster Live 5.1
Speakers (manufacturer and model)	Creative SBS35	Cambridge Soundworks FPS1600	Cambridge Soundworks DTT 2200	Cambridge Soundworks FPS1600
Graphics card manufacturer and model	Leadtek Winfast Geforce2 MX64	Leadtek Geforce2 TI	ATI Radeon 7200	Leadtek Geforce2 TI - 128bit TV-out
Chipset	Nvidia Geforce2 MX 200	Nvidia Geforce2 TI	ATI Radeon	Nvidia Geforce2 TI
Memory and type	64MB DDR SD-Ram	64MB DDR SD-Ram	32MB DDR-SDRam	64MB DDR SD-Ram
Graphics card interface	AGP 4x	AGP 4x	AGP 4x	AGP 4x
Monitor manufacturer and model	CTX VL700	Samsung 753DFX	LG 775FT	17in Mitsubishi DPro 730
Monitor size/max viewable diagonal	17in/16in	17in/16in	17in/16in	17in/16in
Maximum resolution at Vesa refresh	1,280 x 1,024 at 60Hz	1,280 x 1,024 at 75Hz	1,280 x 1,024 at 60Hz	1,600 X 1,200 at 85Hz
OTHER INFORMATION				
Modem manufacturer and model	MRI 56K V.90	Evesham 56K V.90	Smartlink 56K	Etec 56K voice modem
Misc hardware	N/A	N/A	N/A	N/A
Bundled software	N/A	N/A	N/A	N/A
Standard warranty	2 years on site	2 years on site	1 year on site, 1 year C&R	3 years (UK mainland) parts & labour comprising 3 years on site

* RTB = return to base, C&R = collect and return



MULTIVISION	PANRIX	POLAR	POWEROID	SYSTEMAX	TIME
VISION CHOICE 2TI	TITAN XP-2	PREDATOR 1400	3015	A1700FW	MACHINE 1700+ VQ FLEX
£938.83 (£799)	£938.83 (£799)	£938.83 (£799)	£938.83 (£799)	£938.83 (£799)	£938.83 (£799)
0870 066 0885	0113 244 4958	0800 138 1238	0870 220 0444	0870 7297 366	08707 830 3116
www.multivision.co.uk	www.panrix.com	www.polartechnology.com	www.poweroid.com	www.systemaxpc.co.uk	www.timecomputers.com
AMD Athlon XP 1700+	AMD Athlon XP 1800+	AMD Athlon 1.4GHz	AMD Athlon 1.4GHz	AMD Athlon XP 1700+	AMD Athlon XP 1700+
512MB	256MB	256MB	256MB	256MB	256MB
PC 2100 DDR SD-Ram	PC2100 DDR SD-Ram	PC2100 DDR SD-Ram	PC2100 DDR SD-Ram	PC2100 DDR SD-Ram	PC2100 DDR SD-Ram
1/2	1/2	1/1	1/3	1/2	1/1
1GB	768MB	768MB	1GB	768MB	512MB
1.5GB	3GB	1GB	3GB	1.5GB	1GB
Seagate, Barracuda ATA IV, 7,200rpm	Maxtor 5T040H4 7,200rpm	IBM Deskstar 7,200rpm	Maxtor Viper 7,200rpm	IBM Deskstar 7,200rpm	Seagate Barracuda IV 7,200rpm
40GB/UltraDMA100	30GB/UltraDMA100	40GB/UltraDMA100	40GB/UltraDMA100	40GB/UltraDMA100	40GB/UltraDMA100
Mirai BP 1500 24x 10x 40x	Cyberdrive CW038D	Mitsumi CR48X48TE	Samsung 16x 10x 32x	Samsung SW-216B	LG CED-8081B
MSI	MSI	Asus	Abit	MSI	Gigabyte
MS 6380LE (K7T266Pro2)/Via KT266A	K7T266Pro2/Via KT266A	A7V266/Via KT266	KG7-Raid/Via KT266	K7T266Pro/Via KT266	GA-7DX/AMD761 and Via 686B
2/4	4/3	3/2	3/3	3/3	4/3
1/2	1/2	1/1	2/1	1/1	2/1
3/0/0/1	5/0/0/1	5/0/0/1	6/0/0/0	5/0/0/1	5/0/0/1
5/0/0/1	2/0/0/1	3/0/0/1	3/0/0/0	3/0/0/1	3/0/0/1
4/2/2/2	8/2/1/2	4/2/1/2	2/2/1/2	2/2/1/2	4/2/1/2
Pioneer DVD-116	Hitachi GD-8000	Hitachi GD-800	Toshiba DM1612	Samsung SD-616F	Toshiba SD-M1502
16x/EIDE	16x 48x/EIDE	16x/EIDE	16x/EIDE	16x 48x/EIDE	16x 48x/EIDE
Creative	Creative	Videologic	Creative	Creative	Onboard
Soundblaster Live 5.1	Soundblaster Live 5.1	Sonic Fury	Audigy	Soundblaster Live 5.1	CT5880
Cambridge Soundworks DTT 2200	Cambridge Soundworks DTT 2200	Cambridge Soundworks FPS1600	Cambridge Soundworks DTT 2200	Cambridge Soundworks DTT 2200	Cambridge Soundworks FPS1600
Gainward Geforce2 TI/500	Leadtek Winfast Titanium TH	Asus V7100Pro	MSI	Gainward Geforce2 Pro/450	Microstar MS8826
Nvidia Geforce2 TI	Nvidia Geforce2 TI	Nvidia Geforce2 MX 400	Nvidia Geforce2 Pro	Nvidia Geforce2 Pro	Nvidia Geforce 2 MX400
64MB DDR SD-Ram	64MB DDR SD-Ram	64MB DDR SD-Ram	64MB DDR SD-Ram	64MB DDR SD-Ram	64MB DDR SD-Ram
AGP 4x	AGP 4x	AGP 4x	AGP 4x	AGP 4x	AGP 4x
NEC Multisync 75F	Iiyama LM702UT	NEC Multisync 95F	Iiyama Vision Master Pro 413	CTX/EX710F	LG 775FT
17in/16in	17in/16in	19in/18in	17in/16in	17in/16in	17in/16in
1,600 x 1,200 at 75Hz	1,280 x 1,024 at 60Hz	1,600 x 1,200 at 75Hz	1,600 x 1,200 at 77Hz	1,600 x 1,200 at 77Hz	1,280 x 1,024 at 60Hz
Elsa 56K Microlink	Diamond Supraexpress 56I	Lucent Winmodem 56K V.90	Best Data Fax Modem 56K	Connexant 56K	Time HSP56
Thrustmaster Joypad, Firewire	N/A	N/A	ATI TV Tuner	N/A	N/A
Lotus Smartsuite Millennium, Nvidia Triforce Games Pack	N/A	N/A	Lotus Smartsuite Millennium	N/A	Star Office
1 year on site, 2 years RTB	2 years on site	2 years on site	2 years on site	2 years on site	2 years on site

Editor's Choice

We're all a bit broke after the recent festivities, so thank goodness for low-cost components. Even the latest chips from both Nvidia and AMD can be squeezed in at this price point. This causes worry, as price reductions are sometimes an indication of a collapsing market. A good sign of late, though, has been the increase in memory prices; a sign at least that the market may be stabilising, or at least the plummet of recent times may be levelling off.

The winners

There was a distinct gap between the head of the field and the rest this month. Four manufacturers in particular caught our eye, as they had pulled out all the stops to supply systems that came in at under £800 excluding VAT, but had the feel of a £1,000 system. Although it was very close between the front runners, we felt that the **Panrix Titan XP-2** gave just that little bit more, earning it the **Editor's Choice** award.

The new case means it's better looking than previous Panrix machines, and it also gave some of the highest test scores, coming top in 3DMark 2001 and not far behind the leaders in both Sysmark and Quake III: Team Arena. This is mainly due to Panrix's exclusive use of an Athlon XP 1800+, the fastest processor currently available, and the use of a Geforce2 TI card from Leadtek. This revision of the Geforce2 chip has given some excellent results, as the 3DMark 2001 scores show.

When it came to sound, it had the same components as many other machines on test, but just because it's common doesn't mean it is still not great value and of a high standard; Creative's Soundblaster Live 5.1 and the Cambridge Soundworks DTT 2200 make an excellent value pairing.

If we had to criticise, we'd have preferred to see a better quality monitor and perhaps a Firewire port of some description. However, the PC does give us eight USB ports, two of which are USB 2.0 compatible. So for under £800 ex VAT, there's very little to complain about.

The first **Highly Commended** award goes to the powerhouse **Mesh Matrix XP 1700 Plus**. Coming top in nearly all our tests, it was incredibly fast,

even for an Athlon XP-based system. An Athlon XP 1700+, sitting on the Asus A7A motherboard, which uses an Alimagic chipset, and coupled with 512MB of PC2100 DDR SD-Ram, seems to have a definite impact on performance, as the Mesh came out top in Sysmark 2001 with 175 overall.

Leadtek's Geforce2 TI gave some excellent scores in this test, being present in both this system and the Panrix. It outshone its competitors, particularly in Quake III: Team Arena, giving a blistering 74.4fps. The 17in NEC Mitsubishi monitor was of a decent standard too.

With 40GB of storage from Maxtor and an ultra-fast 24-speed CD-RW drive from Teac, there are plenty of storage options. There's also a 16-speed DVD drive from Pioneer.

What blocked its immediate path to a clear Editor's Choice award was down to the lack of six-channel speakers. Considering the very low cost of Cambridge Soundworks DTT 2200 speakers, there's no reason these can't be included, even in the cheapest of systems.

Although the **Poweroid 3015** does not include an Athlon XP processor, instead opting for a Thunderbird model, its performance scores are still very high and more than enough to achieve a **Highly Commended** award. Although Athlon XP processors are more competent performers than the old Thunderbirds, the difference in general day-to-day running is marginal. As a result the extra cost could have been better spent elsewhere.

Poweroid used Abit's KG7-Raid motherboard, which is an excellent performer, winning December 2001's group test. The 3015 completes the Raid setup with a 40GB Maxtor hard drive; a particularly commendable effort in a system costing less than £800.

The 16-speed CD-RW and DVD drives are also of high quality, but what really impressed was the inclusion of Creative's recently released Audigy sound card. The Audigy has easily taken over the sound card throne from Creative's previous-generation card, the Live 5.1, and it is surprising to see Poweroid has found the budget to include it here, especially as it doesn't impact on the rest of the system.



Panrix Titan XP-2



Mesh Matrix XP 1700 Plus



Poweroid 3015

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