FAMILY VALUE

Choosing a PC that's suitable for the whole family can be a tricky affair, especially with so many new models on the market. We test seven systems designed to have something for everyone

It has never been so difficult to choose the right PC for your home. There are hundreds of models on the market, and recently there's been a spate of new developments to confuse the issue further. New processors such as the Pentium II and AMD's K6 have arrived, and then there's Intel's new AGP graphics technology. Just what do you need?

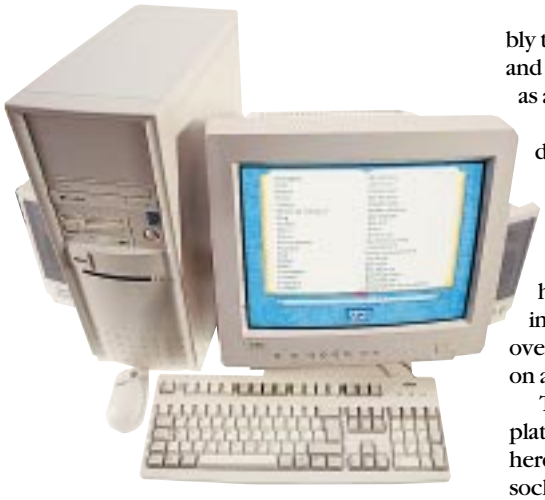
We set manufacturers a generous price limit of £1,600 and asked them to provide us with a PC system suitable for a family. It had to be fast, because multimedia packages and games place enormous demands on a PC, and you shouldn't buy a second-rate computer just because it's for the home. However, we didn't expect blistering performance – as long as the system was fast enough for business software and for games we were happy.

We wanted to see a good range of software, so you could use the PC just as it came out of the box. There are multimedia CD-ROMs for all the family now: encyclopaedias and recipe books, drawing programs and educational discs. We wanted a couple of games as well, just for light relief – a lot of graphics card manufacturers bundle these to show off the capabilities of their cards.

Most people have to take work home sometimes, or use their PC to write letters, so we also expected an integrated package such as Microsoft Works. Some manufacturers supplied a fully-fledged office suite and this was great value, though perhaps slight overkill.

Finally, almost half the manufacturers supplied a printer as well, just in case you want to see your work on paper. We allowed these suppliers an extra £200. Mail order, this will buy you our Best Buy colour inkjet printer (see our September issue), the Epson Stylus Colour 400, with enough left over for a printer cable and some glossy paper for high-class prints.

Dan Dantum II/S7



For a long time, we've been recommending Dan PCs. The ones we've seen have been well built and Dan has a reputation for reliability. The Dantum II/S7, though, was a bit of a let-down.

This isn't to say that it's a bad machine, more that a number of niggly points combined with our high expectations to disappoint us. On paper, it's a good-looking PC. There's a Pentium II-233 processor, the requisite 32Mb of RAM and a fair-sized hard disk. The rest of the specification is possibly the best here, with a fast modem, TV and radio tuner card and Zip drive, as well as a 17in monitor.

It was with the monitor that the disappointments started. It's a reasonable CTX model, but it came with a power cable that needs to be plugged into the back of the PC, where there isn't a socket to match it. Dan should have supplied a cable that plugs directly into the mains. We are sure this was an oversight, but it shouldn't have happened on a carefully checked machine.

The modem has a socket on the backplate so you can plug a phone into it, but here again you'd have difficulties: the socket is partially blocked by the rear of the case. You might have more problems if you want to use the Zip drive to share your data with someone else, as the machine wouldn't boot without a disk inserted. This is apparently due to the type of interface used by this model of Zip drive and shouldn't be a problem by the time you read this.

That said, the combined radio/TV card works well – you get a radio aerial too – and the speakers are of decent quality even though we'd never heard of Yamada. Dan supplies a Microsoft IntelliMouse and the Dantum II/S7 is the only system here to come with a joystick. There are half a dozen Microsoft multimedia titles and a copy of Works pre-installed – fine for home use, but we would have expected a Works CD-ROM to be included at this price.

The system's performance is sufficient for most purposes and, despite the supplied ATi graphics card being PCI rather than AGP (this too should have changed by the time you read this but our tests apply to the machine we saw), we were impressed by its display speed. It should be fine for both games and multimedia titles.

All our criticisms are minor, and some should have been addressed by the time any readers actually buy this system. If you buy this PC, it will be satisfactory, but you could make a better choice.

- £1,599 (inc VAT)
- Dan Technology: 0181 830 1100

Dan Dantum II/S7	
Build quality	★★★☆☆
Features	★★★★★
Performance	★★★☆☆
Value for money	★★★☆☆
Overall	★★★★★

Gateway 2000 G6-233M

Despite Gateway 2000's reputation for supplying quality systems, it's been some time since we have had a look at one. The trademark cow-patterned boxes were a welcome sight, and the motif is continued inside. Gateway is one of the few companies to supply its own manuals, and these too have black-and-white covers.

A consistent image is clearly important: even the Microsoft-supplied Intellimouse has been overprinted with Gateway 2000's name. The case is distinctive, with curved sides that make it look bulkier than it really is. All the ports are colour coded *and* labelled, so you'd really have to try hard to set this machine up wrongly.

In front there's a Zip drive in addition to the normal floppy and CD-ROM, and inside all is shipshape. An Ensoniq sound card powers a pair of Altec Lansing speakers, while the display is provided by an STB graphics card. This is faster than the more common ATi cards, and this is reflected in the G6's high Final Reality score (see box, page 77).

Gateway managed to bundle a printer with its system, and we were pleased to see that a printer cable was included. The Epson Color Stylus 300 will win few awards but is fine unless you need the very highest quality output.

The own-brand monitor was more than acceptable. Flip down the little door on its front and you'll reveal a knob which you can both turn and press. Although some people find this difficult to adapt to, we think it's a remarkably intuitive way of adjusting the display.

Gateway has included a generous software bundle: Microsoft Home Essentials (which contains Word, Works and Money 97) and a Microsoft games bundle with five titles including Flight Simulator and The Neverhood.

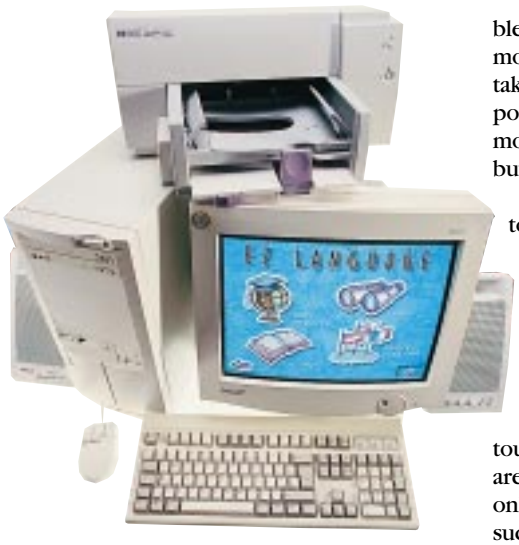
With all this, it seems ungracious to quibble that the hard disk made more noise than usual and the system was set up for American users. It's only a few mouse-clicks to correct the latter, but it still seems at odds with the fact that so much care has been taken to make the G6-233 so easy for first-time buyers to set up and run.

The G6-233M is a fair buy. There is little to criticise: it makes up in graphics performance what it lacks in raw speed and would grace anyone's desk.

- £1,684.95 (inc VAT)
- Gateway 2000: 0800 552000

Gateway 2000 G6-233M	
Build quality	★★★★☆
Features	★★★★☆
Performance	★★★★☆
Value for money	★★★★☆
Overall	★★★★★

Impact Family System



Midland Equipment Brokers has been selling computer parts and peripherals for some six or seven years. It's now building and selling its own machines under the name Impact Systems: this is the first PC we've seen with quite such a lurid orange badge.

As a whole, it's a fair specification for the price, with an AMD K6 processor and a generous hard disk, together with a sensible 32Mb of RAM. We didn't like the mouse, a cheap serial model that doesn't take advantage of the system's second PS/2 port, nor the lack of USB support. At the moment there are few USB peripherals, but this might be a problem for the future.

Midland has chosen a MAG 17in monitor, and supplied a DeskJet 690c printer. Although we've not seen this particular screen before, it gives a fair picture and is adjusted using a rotary control which we found particularly intuitive: the printer too is certainly adequate for home use.

Beginners might find the system a touch difficult to set up: none of the ports are marked and although most cables will only fit in the places they are meant to, such a process of trial and error would be frustrating. It's fitted with an Orchid Righteous 3D accelerator card in addition to a conventional ATi Charger graphics card, and the two must be connected with a VGA pass-through cable to get the benefit of this setup. Fine – except that the cable isn't fitted and it's only documented in the manual for the Righteous itself. Moreover, although the printer does come with a cable, the drivers aren't installed on the system and you'll need to hunt out the disks before you can print.

Despite these points of detail, there is a lot that indicates some thought has been put into the building of this Impact system. It's well built and tidy inside, and you even get a pack of cable tidies to clip the wires neatly away as well as a book on Windows 95. There's a copy of Microsoft Office Professional, which is great value even though we feel Office Small Business Edition is better suited to home users, as well as Encarta 98 British edition.

The Impact is a decent system and you shouldn't go far wrong with it. Unfortunately, it's up against stiff competition in this test and we feel there are better choices.

- £1,761.33 (inc VAT)
- Midland Equipment Brokers: 0800 833157

Impact Family System	
Build quality	★★★☆☆
Features	★★★☆☆
Performance	★★★☆☆
Value for money	★★★☆☆
Overall	★★★★★

Printer technology

If you are to output your work to paper, you'll need to buy a printer to go with your computer. Half of the systems tested here come supplied with an inkjet printer that you can use to print in colour. For the home, inkjets are certainly the best printers for general use.

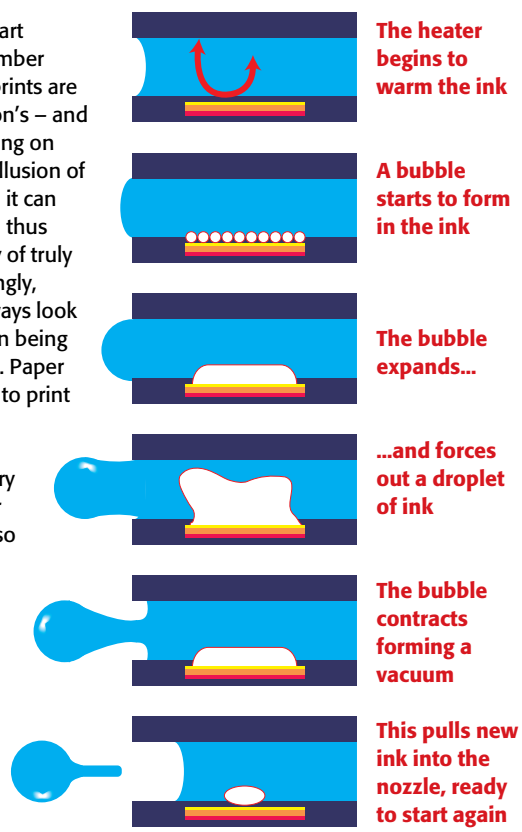
Lift the lid of any of these printers, and you will see a print cartridge that moves on rails. It contains coloured inks that are forced out through nozzles and onto the paper. The individual dots of colour are so small and so close together that the eye can be fooled into thinking that there is a smooth transition between different tones.

Canon's technology relies on a tiny heater by each nozzle. When switched on, it causes a bubble in the ink which expands, forcing the colour out of the nozzle and onto the paper. Then the heater is switched off and the bubble contracts again, drawing in more ink to fill the gap.

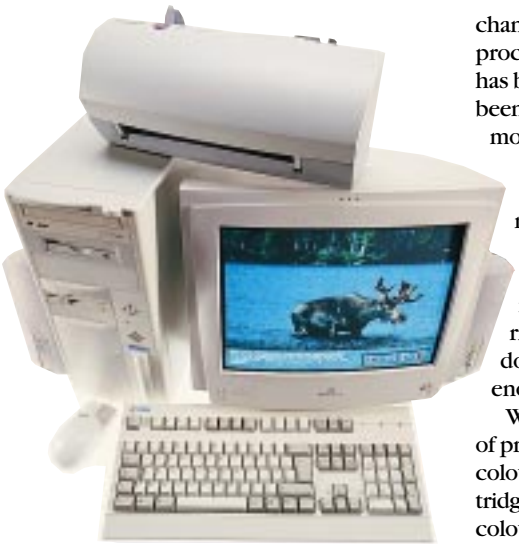
Epson uses a similar technique but relies on piezo-electric actuation to force the ink out of the print nozzles. It's also Epson that has led the development of high-resolution inkjets, with its Stylus Photo capable of printing a staggering 1,440 dots per inch (dpi). There's no denying it produces great prints, but other companies have taken other routes.

Although the HP PhotoSmart printer we reviewed in November prints at a paltry 300dpi, its prints are nearly on a par with the Epson's – and it's cheaper. Rather than relying on ever tinier dots to foster the illusion of continuously varying colours, it can mix the inks on the page and thus gets even closer to the reality of truly photographic prints. Accordingly, when choosing a printer, always look at the print quality rather than being seduced by a high resolution. Paper too makes a huge difference to print quality.

Most printers will produce reasonable output on ordinary copier paper but inkjet paper has a smoother surface and so doesn't soak up the ink as much. The result is brighter and sharper, but for the very best results you'll need to invest in glossy photo paper. Although this can be over a pound a sheet, it can help the best printers to produce results you'd be proud to frame and display.



Mesh Pegasus 266LX



Now well into its eleventh year of building PCs, North London-based Mesh regularly submits machines to the *What PC?* Labs. In fact, this is the second time we've seen the Pegasus 266LX: it won our Best Buy award when it was entered for the Pentium II group test in the December issue.

Since then, its specification has changed. It still has the same PII-266 processor, but the healthy 32Mb of SDRAM has become 64Mb and the hard disk has been upgraded to a 4.3Gb model. What's more, there's a Zip drive and at this price Mesh can now supply a printer and a 17in ADi monitor rather than the 15in model that we saw in December.

This is an attractive-looking model and has a clear display, but we found it very dark. Turning the brightness right up was a simple solution, but this does suggest that there isn't really enough range in the monitor's controls.

We were disappointed by Mesh's choice of printer. A Lexmark 1000, it produces fair colour output but can only take one cartridge at a time. It is supplied with just a colour cartridge, and although this can produce black – well, more a muddy brown – by mixing the other inks, this is a wasteful process. Even if you buy a separate black cartridge, swapping between the two will be tedious, though essential if you want to mix quality text with illustrations.

Nonetheless, at least it will be easy to get it up and running: Mesh had installed the driver and as we'd hoped, there was a cable in the box. Lotus SmartSuite is also pre-installed and there are half a dozen other titles including IBM's Worldbook encyclopaedia, Quicken and a racing game.

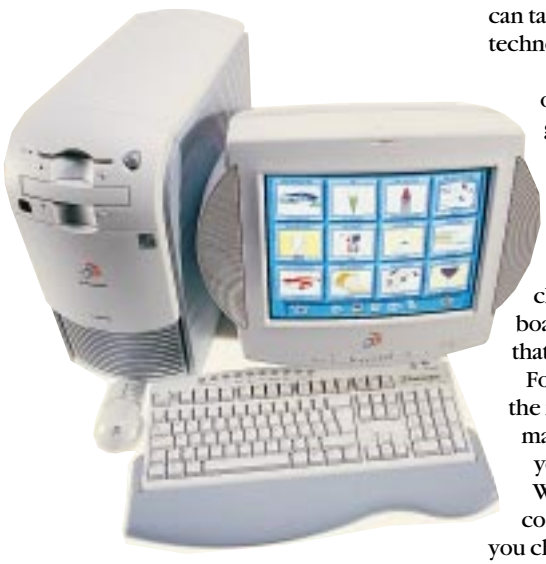
One thing you can be sure of is that the Pegasus won't have any problems dealing with any current software. It's a fast machine anyway and has exceptionally good graphics performance. Its Final Reality score is the highest here, so it should be a fine choice for demanding games players. Our only quibble is that AGP does not seem to have been enabled properly – but this should soon be corrected and in any case won't cause problems until the first AGP-enabled software is on sale.

The Pegasus was a fine machine in December and, newly upgraded, it's now even better.

- £1,733.13 (inc VAT)
- Mesh: 0181 452 1111

Mesh Pegasus 266LX	
Build quality	★ ★ ★ ★ ☆
Features	★ ★ ★ ★ ☆
Performance	★ ★ ★ ★ ★
Value for money	★ ★ ★ ★ ★
Overall	★ ★ ★ ★ ★

Packard Bell Pulsar 20



The Pulsar is the only machine reviewed here that's available through high street stores as well as directly from Packard Bell (no relation to either Hewlett-Packard or the Bell telephone company).

Its problem is that the stores have higher costs which they need to pass on to their customers, and because they carry large stocks rather than building to order it can take longer for them to introduce new technology.

Although it costs a little less than the other machines on test, the Pulsar is grossly under specified by comparison with them. It is the only one to have a processor slower than 233MHz, the only one with a paltry 16Mb of RAM and the only one with a 15-inch monitor. Its graphics chips are integrated into the motherboard, and the end result is a computer that is by far the slowest machine here.

For a family PC, it's not critical to have the fastest computer possible but performance must be adequate, especially if you're hoping to use it to play games.

While it will run business software comfortably, the Pulsar will struggle if you challenge it with multimedia and games software. It's half the speed of any other PC in this test, a third of the speed of the Paragon and Final Reality shows that its graphics just aren't up to the mark either.

In its favour, the Pulsar is reasonably well built. It's the most obviously 'styled' PC here, with natty grey sides to its case and a curved front, together with a sliding door that conceals the power switch. The large grey button on the front of the machine is a sleep button that will put the PC into a low-power suspend mode: this saves the time it takes to reboot each time you fire the system up.

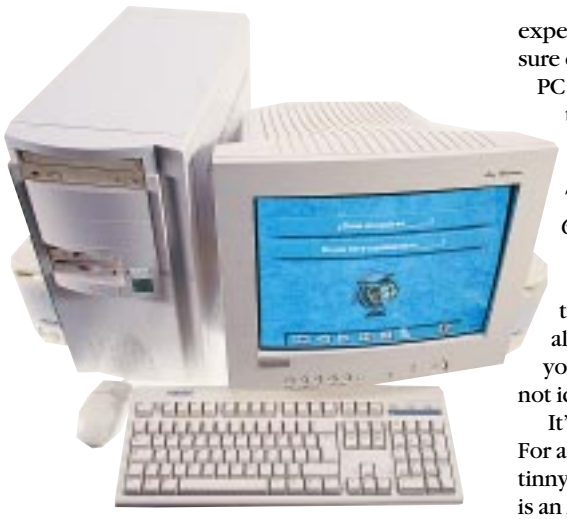
This styling extends to the monitor and mouse as well. The 15in screen is the smallest here but includes speakers: these combine to give it an almost 'smiling' look which is quite attractive. Unfortunately, the Packard Bell-badged mouse is a mistake. Its buttons don't click well, and the standard Microsoft mouse is better shaped and more comfortable to use. At least the software bundle was interesting – there's a good range of multimedia titles including a guide to Paris's Musée D'Orsay.

Compared to every other PC here , this is underpowered and overpriced. It is only worth even considering if you have a burning desire to buy from a retail outlet.

- £1,499 (inc VAT)
- Packard Bell: 01628 508200

Packard Bell Pulsar 20	
Build quality	★ ★ ★ ★ ☆
Features	★ ★ ★ ☆ ☆
Performance	★ ☆ ☆ ☆ ☆
Value for money	★ ★ ☆ ☆ ☆
Overall	★ ★ ★ ★ ★

Paragon Bonanza-300



Paragon normally puts together reasonable PCs. The ones we have seen haven't been exceptional, but the machine submitted for our Budget PCs group test in the January issue was good enough to take our Recommended award.

From the outset, it was clear that Paragon had decided to submit the fastest machine it could create within our price limit. 64Mb of RAM combined with a 300MHz Pentium II processor could be expected to make a good performer, and sure enough the Bonanza-300 is the fastest PC here, with a BAPCo score more than three times that of the Packard Bell.

Unfortunately, this speed has led to a rather unbalanced package. There's a modem and a quality AWE 64 sound card, together with a copy of Microsoft Office Professional. There isn't any multimedia software to accompany this though, so although you could whisk through your spreadsheets in record time, it's not ideal for a family machine.

It's not ideal as a games machine either. For a start, the speakers are small and tinny, and the graphics card isn't great. It is an ATi Charger, and although the Rage II+ graphics chips it is based on are used in three of the PCs here they have been superseded. A better choice might have been the ATi EXPERT card: even with a slower processor, this gives faster graphics than the Charger. This would have enabled Paragon to use the AGP slot as well: although this isn't a major problem at the moment, it will put the Bonanza at a disadvantage when AGP-specific games begin to appear.

What's more, the screen demonstrates very clearly that not all 17in monitors are created equal. It was poorly set up when it arrived, with some of the worst pincushioning (where the sides of the picture are bowed inwards) we've seen. This was easy enough to adjust, but we found the display very flickery. Unusually, it has a power cable that's fixed to the back of the monitor. As this is a pass-through design without a corresponding socket on the PC, you're consigned to adding a normal power cord and having an extra-long cable trailing round the back of your desk.

The Paragon's sole advantage is processing power. It would make a great number-cruncher, but as a home PC it is let down by its elderly graphics chips and the lack of variety in the software bundle.

- £1,600 (inc VAT)
- Paragon: 0181 478 8700

Paragon Bonanza-300	
Build quality	★★★☆☆
Features	★★★☆☆
Performance	★★★★★
Value for money	★★★☆☆
Overall	★★★★☆

Where is the best place to buy a computer?

There are several ways to buy a PC. A direct vendor – mail order – is the route that most of the *What PC?* staff would choose for themselves. It is cheaper not to have large shop premises and most companies pass these savings on in their prices. The sales staff are often more knowledgeable – in a high street store they often know more about washing machines than PCs – and it's possible to find new technology soon after its launch.

You will have to wait a few days for delivery though, and if your PC breaks down you will have to call a busy technical support line and it may have to be taken away for repair.

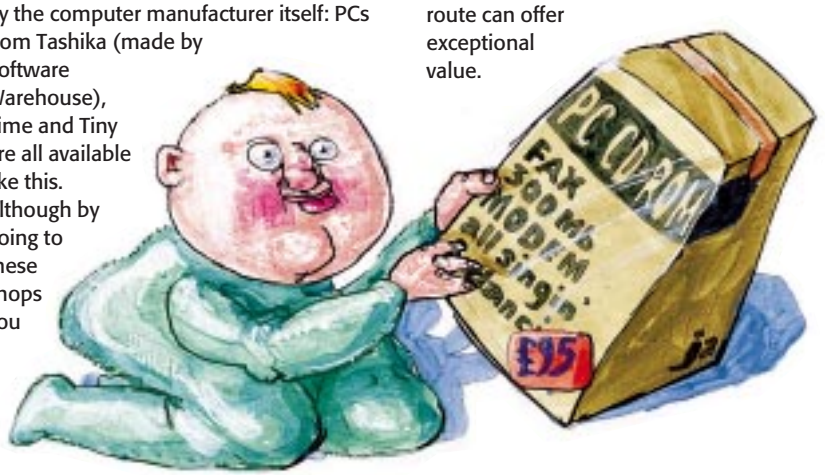
At least if you shop at one of the big retail stores you can take your new PC away on the day that you buy it, and if it goes wrong you can take it back and deal with real people rather than with a voice on the end of the phone. Moreover, there are good chances of paying for your computer on the never-never.

Although some of the bigger mail-order companies offer finance schemes, some allowing you to spread your payments over three years, you are more likely to find an interest-free deal on the high street.

The danger of this, of course, is that your contract for the loan is with a finance company not with the store. If your PC goes wrong or you feel that it is outdated six months after you've bought it, it might be tempting just to take it back to the shop, but you're still liable to continue making the payments.

A third possibility is to buy your machine from a high street store owned by the computer manufacturer itself: PCs from Tashika (made by Software Warehouse), Time and Tiny are all available like this. Although by going to these shops you have access to a more limited choice of products, in theory at least they should give you access to the direct vendor's expertise while retaining the benefits of buying from an identifiable high street store.

In practice though, it has to be up to you to decide which channel suits your needs the best. As long as you are confident enough to ask lots of questions, then you shouldn't have trouble whichever you choose and the mail order route can offer exceptional value.



Synteq PS-233ME

Although Synteq has been in existence for just over a year and a half, we first saw one of the company's systems when it was entered for our Budget PCs group test in January. Then, the machine we saw swept the board: with double the price limit, we were interested to see if Synteq could double its quality.

Of course the answer is no – a £1,600 PC isn't twice as fast as an £800 one, but we were still impressed. The PS-233ME is the only machine here to be fitted with a Cyrix chip, and this, together with its 64Mb of RAM, gives it a good turn of speed.

The machine has been carefully put together, and we like the case's gentle curves. The CD-ROM drive is unusual in that it has a slot rather than a drawer, and draws CDs in after a gentle push.

Inside, the system looks incredibly neat as all the cables are held together in plastic conduits. It might be awkward to get to a power cable if you want to add another drive, but at least there are four free power connectors.

Synteq has chosen the same ADi monitor as Mesh, and paired it with an ATi graphics card with a whopping 8Mb of VRAM. Despite the fact that the machine has a Cyrix processor, this is an AGP card. AGP was at first only available on Pentium II machines.

Unfortunately, 3D graphics use a lot of floating point calculations (fractions) and the 6x86MX processor isn't as good at these as Intel's chips. This helps to explain the PS-233ME's comparatively low Final Reality score.

Extras include a modem and a TV tuner card that occupy the motherboard's only ISA slots. The sound card is a PCI model from Asus – this is still unusual but is set to become more common as the PC 98 specification prohibits manufacturers from using ISA devices. It's matched to a set of tiny Altec Lansing speakers with a subwoofer to provide bass: these could do with a volume control.

Finally, Synteq has provided a good general software bundle. There's Lotus SmartSuite, CorelDRAW 4 and a copy of Quicken together with an encyclopaedia and a route planner – a good mix.

It's good to see a fast machine that doesn't use an Intel chip – and still better to see one that gives the extra future-proofing of AGP without insisting that you also invest in the Pentium II.

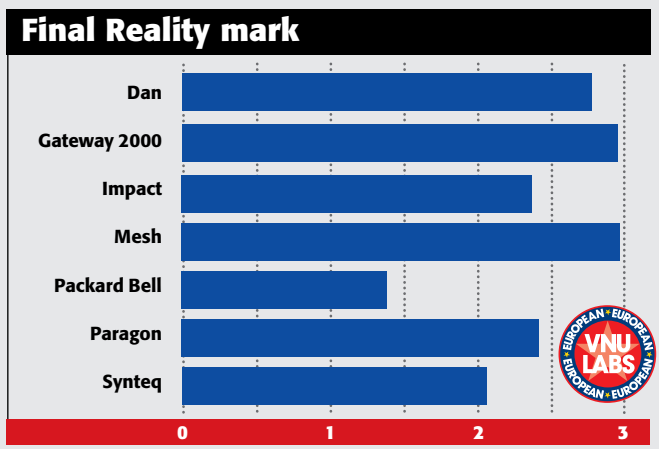
- £1,598 (inc VAT)
- Synteq: 0181 537 0037

Synteq PS-233ME	
Build quality	★ ★ ★ ★ ★
Features	★ ★ ★ ★ ★
Performance	★ ★ ★ ★ ★
Value for money	★ ★ ★ ★ ★
Overall	★ ★ ★ ★ ★

Final Reality

The Final Reality benchmark was developed by VNU European Labs in conjunction with Finnish games company Remedy Entertainment. Remedy's expertise means that the test is as close to a game as possible: most users will only stretch their 3D card by playing the latest games. Current 3D graphics cards have a wide range of new functions, and we insisted that Final Reality test as many of these as possible. What's more, it loads the card very heavily, so will provide a realistic challenge even to the next generation of 3D accelerators and those already using AGP (Accelerated Graphics Port) technology.

The test looks spectacular and has a specially written soundtrack, so it's fun to use. If you want to test the graphics performance of your own machine, there's a full copy of the benchmark on the November 1997 *What PC?* cover CD, or you can download it from www.finalreality.com.



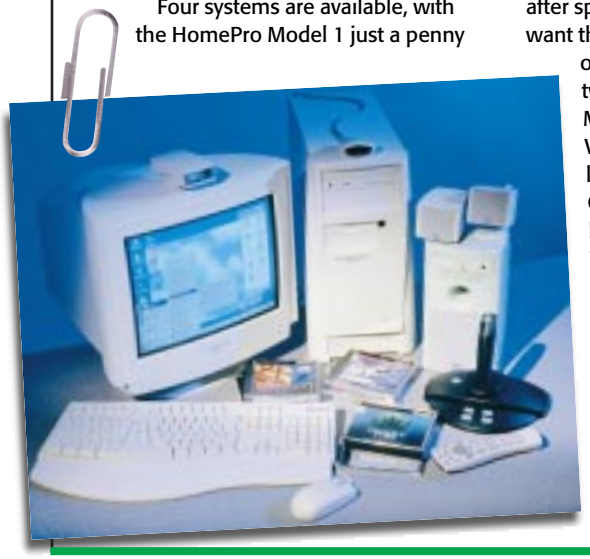
Alternatives

Bar the Packard Bell, all the machines in our main group test have one thing in common – they are sold mail order. If you want to see your PC before you take it home, you could choose the Pulsar – or go for the feeling of safety offered by the Microsoft name. Co-branded with Microsoft, the Viglen HomePro range is available exclusively through Dixons Group, which includes Currys and PC World.

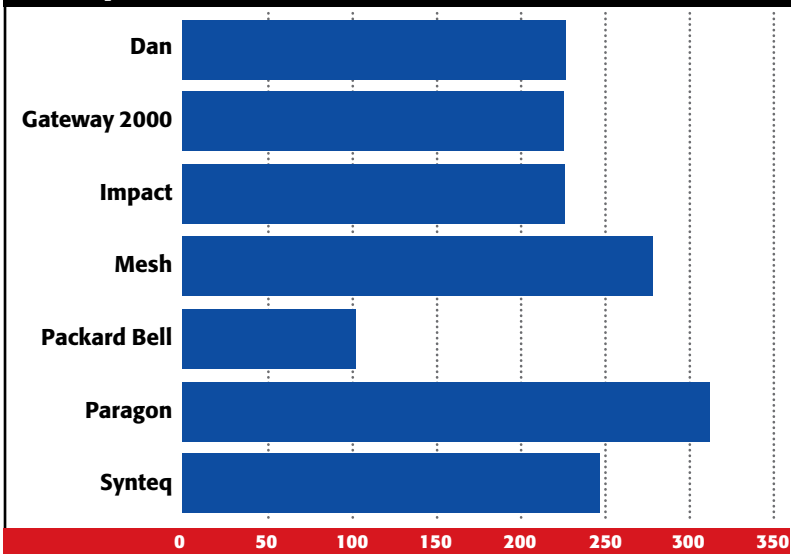
Four systems are available, with the HomePro Model 1 just a penny under the £1,600 price limit we set for the main test. It comes with 16Mb of RAM and a Pentium 200MMX processor, together with a 2.5Gb hard disk. The package is rounded off with an ergonomic Microsoft Natural Keyboard and comes with a SideWinder Pro joystick you can use to play Deadly Tide. This is only part of a software bundle that also includes Works and Encarta 97.

If, on the other hand, you're simply after speed and don't want the security offered by the twin brands of Microsoft and Viglen, take a look at KT Computers' latest machines. The KT Vision-300A, available for £1,596.83, is based on an Intel Pentium II-300, and comes with an impressive 64Mb of RAM. There's 4.3Gb of hard disk space and plenty of screen real estate with a 17in monitor, driven by a Diamond Viper AGP graphics card. An AWE64 ensures quality sound, while fast communications shouldn't be a problem with the 56Kbits/s modem fitted as standard.

- Dixons Stores Group – branches of Currys, Dixons and PC World nationwide
- KT Computers: 0181 961 8897
- Viglen: 0181 758 7000



Family PCs BAPCo test



NOTES: BAPCo benchmarks from which this chart was generated were performed in the *What PC?* VNU Labs. In all tests, a longer bar indicates a better system performance.

Performance is affected by a number of factors, including processor, memory, graphics hardware and hard disk, but, as a yardstick, a PC fitted with a Pentium 166MHz MMX and 32Mb of memory comes in at around 165, while a top-of-the-range 266MHz Pentium II machine with 64Mb of memory might score up to 300.

Either the Mesh Pegasus or the Gateway 2000 G6 would make a fine family PC. The Pegasus edges ahead on its specification, while the G6 claws some of this ground back with its exceptional graphics speed. The Gateway's printer is better too, but both machines come equipped with Zip drives for data storage or easy backups.

In the end, although sheer performance wasn't a determining factor in this group test, we felt that the extra futureproofing of 64Mb of RAM was valuable enough to tip the balance. Therefore, the Mesh Pegasus 266LX gets our Best Buy award, this time with a 17in monitor and Lexmark printer.

For obvious reasons, Gateway 2000's G6-233M takes our Recommended award, but it too comes with a printer. If you'd prefer to make your own choice of printer, then you can buy either the Mesh or the Gateway without the inkjets seen here, and with their prices adjusted accordingly.

Alternatively, the Synteq is a fine machine, and well worth considering. However, a Zip drive would have been a useful addition and the PS-233ME's disappointing graphics performance means that it falls just short of a Recommended award

John Sabine

Family PCs compared

	Manufacturer	Dan	Gateway 2000	Impact	Mesh	Packard Bell	Paragon	Synteq
Product	Model name	Dantum II/S7	G6-233M	Impact Family System	Pegasus 266LX	Pulsar 20	Bonanza-300	PS-233ME
	Price (inc VAT)	£1,599	£1,684.95	£1,761.33	£1,733.13	£1,499	£1,600	£1,598
	Contact	0181 830 1100	0800 202000	0800 833157	0181 452 1111		0181 478 8700	0181 537 0037
Features	Processor type	Intel Pentium II	Intel Pentium II	AMD K6	Intel Pentium II	Intel Pentium MMX	Intel Pentium II	Cyrix 6x86MX
	PR/processor speed	233	233	233	266	200	300	233
	Memory	32Mb SDRAM	32Mb SDRAM	32Mb SDRAM	64Mb SDRAM	16Mb SDRAM	64Mb SDRAM	64Mb SDRAM
	Hard disk	4.3Gb	4.3Gb	5Gb	4.3Gb	3.2Gb	6.4Gb	6.4Gb
	CD-ROM	32x max	13-32x	24x	24x	24x	24x	24x
	Sound card	AWE64	Ensoniq	AWE64	Yamaha		AWE64	Asus
	Speakers	Yamada	Altec Lansing ACS41	unbranded	Yamaha YST-M20 DSP	On monitor	Unbranded	Altec Lansing ACS45
	Graphics card	ATI EXPERT@Work	STB Nvidia	ATI Charger	ATI XPERT@Work	ATI Rage II+	ATI Charger	ATI EXPERT@Work
	Graphics type	PCI (1)	AGP	PCI	AGP	onboard	PCI	AGP
	VRAM	4Mb	4Mb	4Mb	4Mb	2Mb	4Mb	8Mb
	Case type	Midi tower	Midi tower	Midi tower	Midi tower	Midi tower	Midi tower	Midi tower
	USB	●	●	❍	●	●	●	●
	Monitor	CTX 17in	Gateway CrystalScan 700 17in	MAG DJ 717 17in	ADI 6P 17in	Packard Bell 5480 15in	17in	ADI 5P 17in
	Modem	56Kbits/s	56Kbits/s	56Kbits/s	56Kbits/s	33.6Kbits/s	33.6Kbits/s	56Kbits/s
	Zip drive	●	●	❍	●	❍	●	❍
	Other	Joystick, TV tuner and radio		Orchid Righteous 3D card, Windows 95 book				TV tuner
	Warranty		1yr OS + 2yrs RTB	1yr OS	1yr RTB		5yrs RTB	1yr OS + 2yrs RTB
	Software	MS Works & MM bundle	MS Home Essentials & Games bundle	MS Office 97 Pro, Encarta 98	Lotus SS97, IBM Simply Speaking, family multimedia bundle	Multimedia bundle	MS Office Pro	SS97 & multimedia bundle
	Mouse	MS I/Mouse	MS I/Mouse	unbranded	MS	Packard Bell	Mitsumi	MS
	Printer	❍	Epson Stylus Color 300	HP DeskJet 690c	Lexmark 1000	❍	❍	❍
	Cable supplied	N/A	●	●	●	N/A	N/A	N/A
	Drivers preinstalled	N/A	●	❍	●	N/A	N/A	N/A
	Colour resolution (dpi)	N/A	720x360	600x300 (2)	600x600	N/A	N/A	N/A
	B&W resolution (dpi)	N/A	720x360	600x600	600x600	N/A	N/A	N/A
	Print speed, colour (ppm)	N/A	3	3	3.5	N/A	N/A	N/A
	Print speed, B&W (ppm)	N/A	1.2	0.8	1.5	N/A	N/A	N/A
Ratings	Star rating							
	Frmark	2.76	2.95	2.36	2.97	1.34	2.39	2.03
	BAPCo	222	221	223	277	102	311	248

Notes: (1) Dan graphics card will be upgraded to AGP on publication.
(2) Requires special paper to achieve this resolution.
SS96 = Lotus SmartSuite 96
SS97 = Lotus SmartSuite 97
MS Office SBE = Microsoft Office Small Business Edition
PW = Novell PerfectWorks
MS = Microsoft Mouse
MS I/Mouse = Microsoft IntelliMouse
RTB = Return to base
OS = On-site

★ = Poor ★★ = Below average
★★★ = Average ★★★★ = Good ★★★★★ = Excellent
❍ No ● Yes