MORE FOR LESS

£799 inc VAT

Buying a complete PC system with Pentium MMX or equivalent processors for £799 or less is no longer a fantasy. We test eight machines that give you power if you're on a budget

A year ago, in our January 1997 issue, we tested 10 PCs based on 200MHz Pentium processors. We set a price limit of £2,000, and some manufacturers struggled to meet it. What's more, only one machine was supplied without an Intel processor inside.

Things have changed quite a bit since then. You can now buy complete systems fitted with new Pentium MMX or equivalent processors, which offer similar performance and multimedia enhancements, for as little as £800. This month we put eight such machines through their paces in the VNU Labs.

Just because they're cheap doesn't mean performance or features have to be sacrificed. All except one of the PCs here have full multimedia capabilities. Also, our benchmark test results put the top performer ahead of two of the Dream Machines we looked at in October and in front of one of the Pentium IIs in last month's issue.

Over the past year, Intel's dominance of the processor market has also lessened slightly. AMD and Cyrix have released rivals to the Pentium MMX and claim that their chips are faster. They're certainly cheaper, which is one reason only half of the machines here have Intel Inside labels on the case and a Pentium MMX chip on the motherboard. The snappily named 6x86MX from Cyrix is in two machines, while AMD's K6 chip powers the other two. Both chips are cheaper and newer than the Intel processor, but do they live up to their performance claims?

You may not sacrifice performance at this price level, but you're unlikely to get a machine from a big-name manufacturer. Apart from Brother, which has many other interests apart from computers, Tiny is the biggest company represented here. Buying from small firms can be an advantage though – they have the flexibility to turn out machines to match your needs, and their lower costs can mean lower prices for you.

Brother Tutor 6x86MX
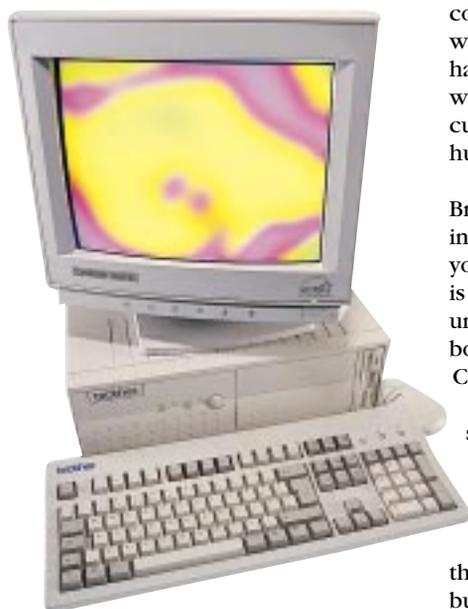
Brother is one of the world's largest – and oldest – electronics companies. Its interests range from electric typewriters to sewing machines, but it also builds computers. Its promotional material boasts that every Brother PC comes with a component 60 years old – we were glad that this component happens to be the name. Anything else would have looked like excessive cost-cutting – unless, of course, you're on the hunt for an antique.

What this does mean is that you get Brother's reputation for quality thrown in, and we found little to criticise in what you get. It is what isn't included which is more of a problem. As soon as you unpack this PC, you'll notice that its boxy desktop case doesn't contain a CD-ROM drive.

It's rare for any software to be supplied on floppy disk these days, so a CD-ROM drive is essential for installing new packages on your machine. Even if you can resist games and multi-media packages, which often require the CD to be in the drive as you use them, business software like Microsoft Office is supplied on CD as standard. You can get Office on floppies, but it costs extra and you'll spend hours feeding a stack of some 50 disks into the drive.

Because it's not a multimedia machine – the multimedia standard requires a CD-ROM drive – it doesn't have a sound card or speakers. These certainly aren't critical for business use: you don't need sound while typing a letter, after all. Nevertheless, if you add a CD-ROM drive in the future you'll be faced with even more expense if you want to run multi-media discs or games.

In its favour, the Tutor is a well-built machine. When we opened the case, it was neat and tidy inside, although some trailing cables might make it difficult to add more memory. And its Cyrix 6x86MX processor makes it the fastest of all the PCs supplied with 16Mb rather than 32Mb of RAM.

It's a speedy and very solid machine. However, the lack of a CD-ROM drive means that the Tutor is almost completely unsuitable for home use.

- £774.33 (inc VAT)
- Brother: 0800 919556

Brother Tutor 6x86MX					
Build quality	★	★	★	★	☆
Features	★	★	☆	☆	☆
Performance	★	★	★	★	☆
Value for money	★	★	★	☆	☆
Overall	★	★	★	☆	☆

Eagle P166 Multimedia Office System
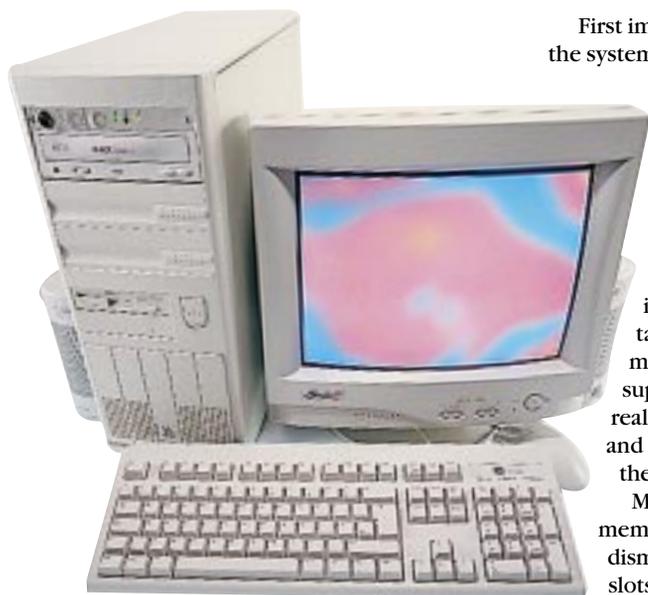
Most small computer manufacturers seem to be based in London and south east England, so it makes a pleasant change to see a PC from a Manchester company. This is the first machine from Eagle Systems we've looked at, so we hoped it would do well in our tests.

First impressions were fairly neutral: the system is housed in a mini-tower case that's no more interesting than any other system box. The monitor is quite rounded, but again, no more so than many other 14in screens.

As soon as we opened up the case, however, we began to change our minds. The inside of the machine was a tangle of cables, leading over the motherboard from the power supply and disk drives. This isn't really a problem, but it looks messy and suggests a lack of care when the system was being built.

More seriously, to add more memory, you'll have to almost dismantle the PC. Both the SIMM slots are occupied, and the two spare DIMM slots are hidden behind the cables. One is even tucked behind the drive cage, which you'll have to remove to get at the DIMM slot.

One of the expansion slots is taken up by a modem – one of only two we saw in this test. Although we were pleased to see it, we were less impressed when we noticed that Eagle had glued it in using some sort of rubber compound. This is sticky, horrible, and completely unnecessary. It might stop the card popping out, but that should be rare in a properly built system.

Good performance or an exciting software bundle might have lifted the Eagle in our estimation, but it doesn't have either of these. It comes with no software apart from some free Internet trials to go with the modem, and although it's the fastest of the PCs based on the Intel MMX processor, it's still only in fifth place compared with the other machines on test.

The Eagle's no high-flyer. It has a fair set of components coupled with mediocre performance, but there's little to make it stand out unless you demand an Intel processor.

- £799 (inc VAT)
- Eagle Systems: 0800 731 6150

Eagle P166 Multimedia Office System					
Build quality	★	★	☆	☆	☆
Features	★	★	★	★	☆
Performance	★	★	★	☆	☆
Value for money	★	★	★	★	☆
Overall	★	★	★	☆	☆

What should you expect for £799?

While the PCs in this group test are classed as 'budget' systems, £799 is a lot of money – especially when you're the one who's spending it. For such an investment the least you should expect is a PC that's fast enough to run the most modern office software well, and that can cope adequately with current games. The parts should be well chosen, and the whole package should work well together.

You should expect to get at least a 166MHz MMX processor for your money: in fact, it's impossible to get hold of anything slower for a desktop PC now, as Intel never made a 133MHz MMX chip and has discontinued the standard Pentium. The chip won't necessarily be made by Intel, especially as the chip giant's rivals have been making a strong showing recently. Half of the machines tested here still have Intel inside, but designs from rival chip makers AMD and Cyrix power the other machines, as these processors are cheaper and can offer performance benefits too.

As for the rest, you'll be looking for 16Mb of RAM (a realistic minimum for Windows 95), a 1.5Gb hard disk to give you the room to install more programs and an 8x (eight-speed) CD-ROM drive. Anything faster is great for installing software but brings little real benefit if you're running programs from the hard disk. Although you don't really need them except for games or multi-media software, a 16-bit sound card and speakers should normally be included as well.

It's virtually impossible to get hold of a graphics card with less than 1Mb of memory now, and we'd recommend that you look for 2Mb as it allows for higher resolutions and more colours on screen. As for monitors, you're realistically looking at a 14in model. We were pleased that one manufacturer managed to include a 15in model – although it sounds very little, that extra inch really makes a huge difference to documents and spreadsheets, while games also feel much less cramped. Note that, unlike a TV, the screen size of a computer monitor is measured from corner to corner of the picture tube itself. As some of this is covered by the monitor case, the visible screen size can be up to 1.5in less than that quoted.

This kind of specification would be fair value for money and make a reasonable budget machine. Anything extra, like a modem or a better sound card, would be nice, while any major deficiencies would be both poor value and an error of judgement by the manufacturer. Even if there were other goodies to compensate, the system would be rather unbalanced.

Paragon Homebase K6

London-based Paragon Computers made a strong showing on its first visit to our Labs three months ago. On paper at least, its submission this month looked good as well – it's the only machine to be supplied with a 15in monitor and one of only two that have 32Mb of RAM.

Like most of the PCs in this test, it comes with a mini-tower case. Normally, we're in favour of this, as you can tuck the system box on the floor out of the way. However, here it leads to our first quibble. The monitor is supplied with a power lead that plugs into the back of the PC, but it's much too short unless you're going to have both on the desk together.

Inside the case looks messy: like Eagle, Paragon hasn't tied any of the cables out of the way. They're reasonably loose, however, so it's easy enough to get at the expansion and memory slots, just a bit awkward as you have to hold the cable back at the same time.

Fortunately, you're unlikely to need to upgrade this machine for some time. Its AMD K6 processor and 32Mb of RAM mean that it comes in second in our performance tests: it also has a decent-sized hard disk and a fair graphics card.

This is coupled with a reasonable 15in monitor. It's as good as you can expect for the price, and the extra inch is well worth while. Although it doesn't sound like much, it really does make working with documents like spreadsheets much easier as they appear larger on screen. Although Paragon has saved a bit of money by supplying Lotus SmartSuite 96 rather than a newer version, this is still a capable office suite. About the only thing you can't do with this machine is get on the Internet – a modem is the only significant omission.

The Paragon is a good performer and a well-rounded system, while its larger monitor gives it the edge over most of the other machines tested this month.

● £799 (inc VAT)
● Paragon: 0181 478 8700

Paragon Homebase K6					
Build quality	★	★	★	★	★
Features	★	★	★	★	★
Performance	★	★	★	★	★
Value for money	★	★	★	★	★
Overall	★	★	★	★	★

Reseda Representative
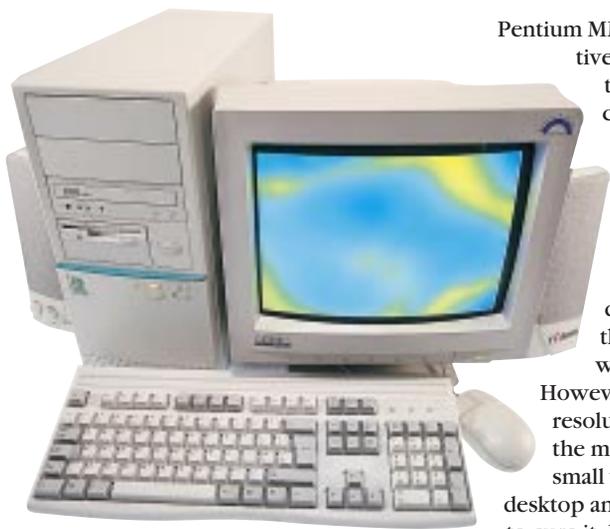
Reseda is another small manufacturer, based in Uxbridge. In common with other companies in this group test, this is the first time that one of Reseda's PCs has appeared in *What PC?*

The Representative is just a whisker off being the cheapest machine reviewed here, but it's certainly a reasonably specified system.

Despite – or possibly because of – its Pentium MMX processor, the Representative brought up the rear in our tests. Nevertheless, it's very close to the other Intel-based machines, and its other components are very respectable, including a hard disk with just over 2Gb of storage.

The Cirrus graphics card displays to a 14in CTX monitor: this gives a reasonable picture when it's set up correctly. However, when we tried to switch resolutions we were flummoxed: the monitor began acting as a small window onto a larger virtual desktop and we couldn't work out how to cure it. It turned out that this was because the wrong monitor type had been set at the factory – a problem that is easy enough to correct, but annoying while it lasts.

To make up for this, the Representative comes with a copy of SmartSuite 97. This is good in itself, but we were particularly pleased to see that an installation CD-ROM is included. Given that some manufacturers demand up to £200 extra for this, it makes the Representative look even more of a bargain.

The most striking thing about Reseda's service is the warranty. The company offers one year's on-site service, provided by its own engineers, with a 24-hour response time and a guaranteed first-time fix. If they can't mend your machine they'll replace it, which seems like quite a good deal.

However, we'd be wary of Reseda's quality control. As well as the monitor problem, our machine came without a power cable. These aren't serious faults, but may indicate slipshod checking at various stages in the process. **If you're on a tight budget then, in spite of its lack of speed, the Representative offers great value for money.**

● £705 (inc VAT)
● Reseda: 01895 251619

Reseda Representative					
Build quality	★	★	★	☆	☆
Features	★	★	★	☆	☆
Performance	★	★	☆	☆	☆
Value for money	★	★	★	★	★
Overall	★	★	★	☆	☆

Synteq VS-200MX
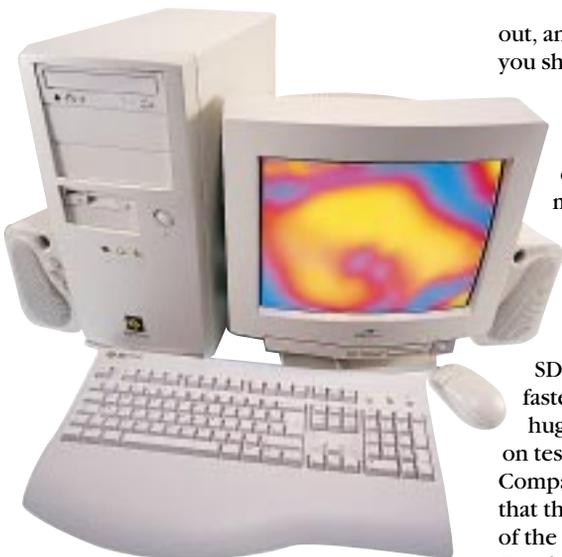
We were impressed with the VS-200MX from Synteq, a relatively small company and, again, this is the first time we've looked at one of its machines. The system box is quite stylish, and with its gentle curves it stands out from the normal straight-sided cases.

Open the box, and the good impression continues. The innards are cleanly laid out, and if you want to add, say, a modem, you shouldn't have any trouble doing so.

It isn't immediately obvious when you open the box, but Synteq has specified a fine set of components. The graphics card has more memory than any other card in this test and comes with a couple of games; there's also a Yamaha sound card and a good pair of speakers.

Better than this, it has 32Mb of SDRAM and a Cyrix 6x86MX-200, the fastest processor here. These show huge benefits – it's the fastest machine on test by a margin of some 15 percent. Comparing it with previous tests shows that the Synteq is actually faster than two of the Dream Machines we looked at in October, and beats one of last month's Pentium IIs by a smidgen.

Lotus SmartSuite 97 is preinstalled and comes with a backup CD-ROM. Strangely, a copy of Novell PerfectWorks is also included. An integrated package, it doesn't seem to have any facilities that SmartSuite can't offer in more depth. The only exception might be its Draw and Paint modules – SmartSuite's graphic functions have to be accessed through Word Pro and Freelance Graphics.

There is only one fly in the ointment. Although the ADi E30 monitor is respectable, our first example had a faulty power switch and we had difficulty getting it to display at 1,024x768 pixels. Next-day replacement is available provided you report the fault before 4.30pm, but we'd rather pay Synteq an extra £46 and get a 15in monitor. It's bigger, and the E40 couples this with a much higher specification. Unless you really can't pay more, it's well worth while as an upgrade. **The Synteq offers an astonishing amount for the price. It's superb value, and a great performer. The standard monitor holds it back though – upgrade if you can possibly afford it.**

● £799 (inc VAT)
● Synteq: 0181 537 0037

Synteq VS-200MX					
Build quality	★	★	★	★	★
Features	★	★	★	★	☆
Performance	★	★	★	★	★
Value for money	★	★	★	★	★
Overall	★	★	★	★	★

Systek Gold Edition
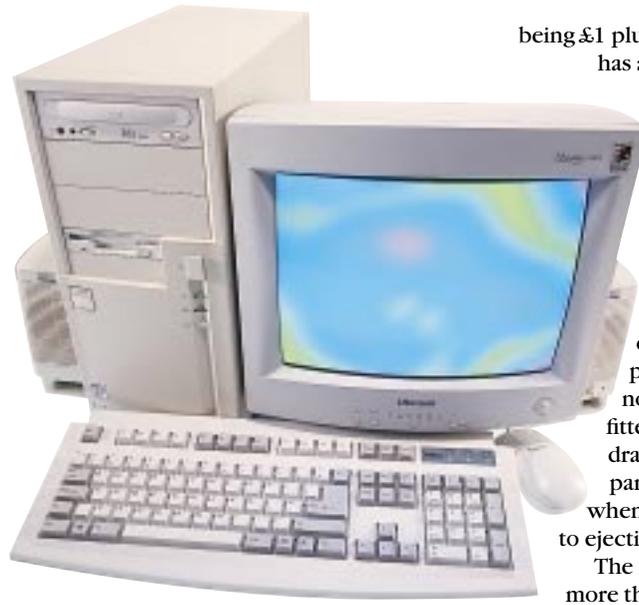
S ystek, like Synteq, is yet another small company appearing for the first time in a *What PC?* group test. Despite the similarity in their names, you'd do well not to confuse the two companies: the machines we've looked at are very different.

For a start, the Systek Gold Edition is the cheapest machine on test. Despite being £1 plus VAT less than the Reseda, it has a 2.6Gb hard disk which shares the top slot for size. Apart from the Intel processor, however, the rest of the components show signs of cost-cutting.

The most obvious victim of this is the CD-ROM drive. We wouldn't normally object to it being a 16-speed device, as this carries no real performance penalty in normal use. But the BTC model fitted here is appalling. Its drawer is curved in a faint parody of styling, it's noisy, and when the drive finally gets round to ejecting a disc it's still spinning.

The rest of the specification is no more than adequate. There's a sound card, speakers and a 1Mb graphics card, The monitor is a Hansol model and works, but the display isn't great and is very flickery if you want to run it at 1,024x768 pixels.

There's no bundled software and when you switch the PC on for the first time, Windows asks if you want to create a set of backup disks. No CD-ROM is supplied, so you'd better have a stack of floppies ready – 29 to be precise – in case you ever need to reinstall.

Unfortunately, this might be sooner rather than later. When we tried to bring up the system properties nothing happened, and although we've never seen this problem before, the only cause we can think of is a corrupted Windows registry, probably caused by incorrect installation.

Apart from this, build quality is reasonable. Everything is in its place and all the cables are neatly bundled, although the main power cables lie over the SIMM and DIMM slots and are so tight that you'll need to disconnect them if you want to add more memory. **It's the cheapest machine on test, and it shows.**

● £703.83 (inc VAT)
● Systek: 01323 520111

Systek Gold Edition					
Build quality	★	★	★	☆	☆
Features	★	★	☆	☆	☆
Performance	★	★	★	☆	☆
Value for money	★	★	☆	☆	☆
Overall	★	★	★	★	★

This is my first PC – what else do I need to budget for?

If you're upgrading from an old PC, you'll know that you need other things as well. A printer is essential to get your work down on paper, while a modem will let you get on the Internet and send e-mail. Software lets you do anything from writing a best-selling thriller to searching for a recipe to use up that last tin of coconut milk, blowing away aliens in the meantime. Like everything else, though, all these cost money: how much should you expect to spend after you've paid for the computer itself?

You may need to buy a new desk and chair: the best advice we can offer here is to ensure that the desk is spacious and sturdy, and the chair is height-adjustable. Business software is included with four of the machines reviewed here but if you need to buy it we'd suggest Microsoft Home Essentials. This bundle contains Word, Works and a couple of other packages for £99.95, the recommended price for Works alone. At £20, £30 or even more per package, it's worth reading our reviews of games and multimedia software, or trying the demos on our cover CD, before you buy.

If you want to print out your work, inkjet printers are probably the best compromise for home use. They're relatively cheap, reasonably fast and can produce very high quality results. Unless you're on an extremely tight budget, it's not worth looking for a black and white inkjet: good colour ones start at around £200, with our Best Buy in September, the Epson Stylus Colour 400, just over £250. It is well worth while getting one that uses separate cartridges for black and coloured inks – research by Canon claims that most users print in black and white 80 percent of the time.

Finally, for business use, even in a home office, you will need some sort of backup device. If you keep information – perhaps a customer list, accounts or invoice details – on your machine, it's probably far more valuable than the computer itself. You can just make regular copies to floppy disk but that quickly gets very tedious. Better solutions include the Danmere Backer 32 – you also need a video recorder but can store up to 4Gb on a single tape – or the Iomega Zip drive. Mail-order, these cost around £100 and can store up to 100Mb on disks little bigger than a floppy.

Danmere: 01606 74330
Epson: 01442 61144
Iomega: 0800 973194
Microsoft: 0345 002000

Tashika Multimedia PC
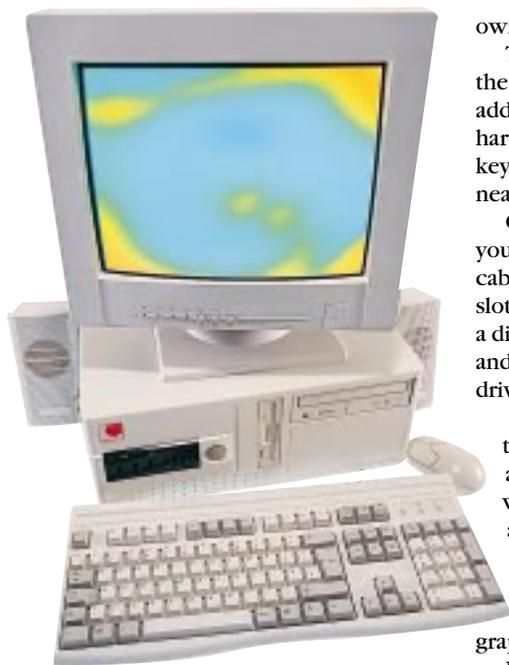
Mail-order giant Software Warehouse distributes branded PCs as well as a wide range of peripherals and, unsurprisingly, software. Since the middle of last year it has also built its own systems under the name Tashika.

The Multimedia PC looks neat from the outside. The 'smoked glass' panel adds a touch of style and conceals the hard disk and power lights, while the keyboard – supplied by Mitsumi – is a neat model that's nice and light in use.

Open the desktop case, however, and you're confronted with a bird's nest of cables. They don't obscure the expansion slots too badly, but the memory slots are a different story, hidden by the cables and, as in the Eagle PC, tucked behind the drive cage.

In the slots that you can see, there's the same model of Yamaha sound card as fitted to the Synteq. This gives you what is known as wavetable sound, and sounds a lot better than the FM-synthesis cards fitted to most of the other machines here. There's also a Rockwell modem and a 1Mb graphics card.

Lotus SmartSuite 96 is supplied with the PC on CD-ROM. Interestingly, this software wasn't preinstalled, but at least this has the advantage that you can choose exactly which programs you want to copy to your hard disk. Given that the Tashika has the smallest disk on test, this might prove valuable, and it shouldn't take too long to install even though the CD-ROM drive is a slightly dated eight-speed model.

In terms of performance, the Tashika Multimedia PC didn't do too badly. It's in fourth place overall, and although it's some way behind the three top scorers, the AMD K6 processor pulls it just ahead of the Intel-powered pack. It can't look good for Intel that its chips are in the four slowest machines here.

The Tashika is the only machine in the test to come with both a modem and decent bundled software. It's a well-rounded package and certainly worth considering if you're not looking for out and out speed.

- £799 (inc VAT)
- Software Warehouse: 01675 468 3333

Tashika Multimedia PC					
Build quality	★	★	★	★	★
Features	★	★	★	★	★
Performance	★	★	★	★	★
Value for money	★	★	★	★	★
Overall	★	★	★	★	★

Tiny Tutor 166 M-System
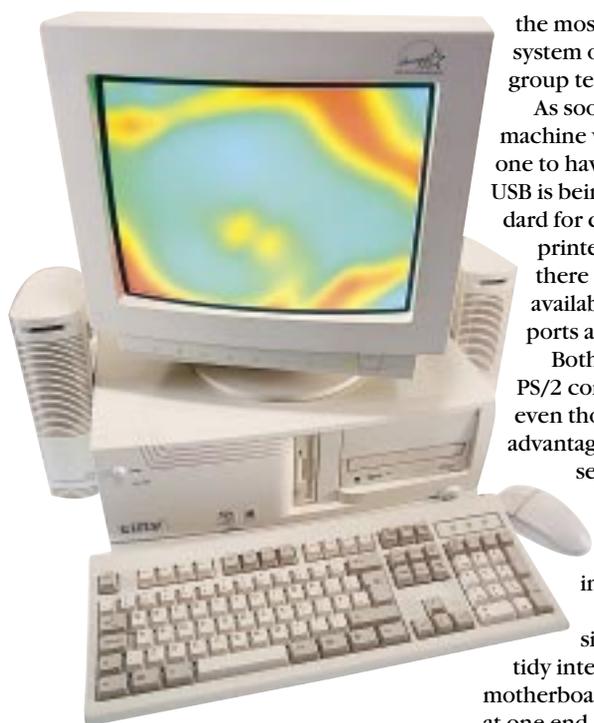
Paradoxically, Tiny is one of the biggest manufacturers reviewed here, but it hasn't prevented care being taken over this system. It is perhaps the most thoughtfully designed system out of all the machines in this group test.

As soon as we unpacked this machine we noticed that it was the only one to have Universal Serial Bus ports. USB is being heralded as the next standard for connecting peripherals such as printers and scanners, and although there are few compatible devices available yet, it's nice to have the ports as extra futureproofing.

Both mouse and keyboard have PS/2 connectors, which look neat even though they have little real advantage, and the monitor has a separate video cable. If a cable should become faulty, it's very difficult to replace if, as is more common, it's built into the monitor.

Inside the box, it was a similar story. It's incredibly tidy internally, partly because the motherboard design places all the cables at one end, away from all the expansion slots. Its 16Mb of RAM is supplied on a DIMM: SDRAM is slightly faster than the older EDO RAM fitted to most of the machines tested.

Two things spoiled our good impressions of this machine. First – and this is a basic error – the monitor power cable was meant to plug into a non-existent socket on the back of the PC. Next, it was also the second slowest machine on test, let down by the Intel processor inside.

Unfortunately, at this price Tiny doesn't include any software except Windows 95. However, our machine was supplied with various programs pre-installed. It's possible to get the Microsoft Family Pack, containing six packages including Works and Encarta, as an optional extra at £57.

The Tiny is well-built and thoughtfully designed. If you want to be able to use Universal Serial Bus peripherals, it's the only machine here that's suitable.

- £797.83 (inc VAT)
- Tiny: 01293 821333

Tiny Tutor 166 M-System					
Build quality	★	★	★	★	★
Features	★	★	★	★	★
Performance	★	★	★	★	★
Value for money	★	★	★	★	★
Overall	★	★	★	★	★

Alternatives

If you're buying your first computer and don't fancy having to budget for extras on top, it might be worth looking for a bundled deal – perhaps the **G5-166M** from **Gateway 2000**. It comes with a 166MHz Pentium MMX processor and 32Mb of RAM, together with the usual bits like decent graphics and sound cards. Despite the inclusion of a 15in monitor and a 56Kbits/s US Robotics modem, it might look poor value at just under £1,200. However, the bundle also includes an Epson Stylus Colour 300 printer. (See Close-ups earlier in this issue for an in-depth review of the G5-166M).

The **Mesh 6x86MX 166 Media+** was submitted for the main group test. Unfortunately, we couldn't get our test suite to run properly on it so couldn't obtain a performance rating for the machine. This isn't a reflection on Mesh – there are incompatibilities between our tests and certain combinations of software and hardware that we are trying to resolve.

As you'd expect for a PC from a company that's just celebrated its tenth birthday, it's a well-put-together machine, and has a good spec for its £799 price. It combines a P166 6x86MX processor with 32Mb of RAM and a 2.1Gb hard disk, as well as a fast ATi Charger graphics card. This is coupled with the same 14in monitor that Synteq supplied.

The bundle includes copies of Lotus SmartSuite 97 and IBM Simply Speaking so you can dictate directly to your PC. Naturally, there's a microphone and sound card too: it seems that about the only thing this PC can't do is run our tests. In fact, it would have been in contention for one of our Recommended slots as long as its performance was up to scratch.

Viglen, meanwhile, has completely revamped its advertising in the run-up to Christmas. The three wise men – or rather two wise men and a wise woman – would apparently be tempted by deals that include the **Home Value PC**. It's above our price limit at £1,003, but is powered by a 166MHz Pentium MMX and has 16Mb of RAM.

A software bundle – the same as Tiny's optional extra – that includes Microsoft Works and Encarta looks good value, and it comes with a 33.6Kbits/s modem to get you on the Internet.

Gateway 2000: 0800 362000
Mesh: 0181 452 1111
Viglen: 0990 944944
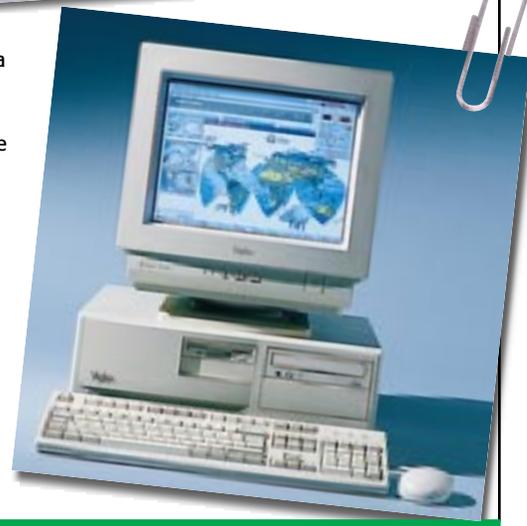
Budget PCs performance graph

Manufacturer	Score
Brother	~147
Eagle Systems	~133
Paragon	~170
Reseda	~125
Synteq	~202
Systek	~132
Tashika	~136
Tiny	~128

(Scale: 0 20 40 60 80 100 120 140 160 180 200)
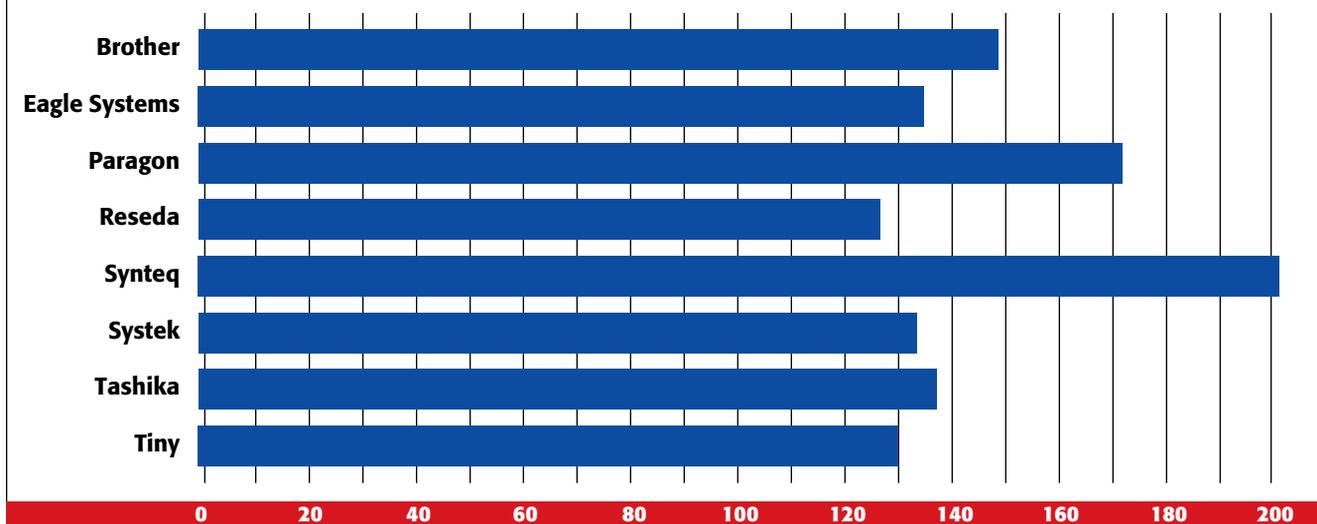
NOTES: BAPCo benchmarks from which this chart was generated were performed in the *What PC?* VNU Labs. In all tests, a longer bar indicates a better system performance.

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.

Budget PCs compared

	Manufacturer	Brother	Eagle Systems	Paragon	Reseda	Synteq	Systek	Tashika	Tiny
Product	**Model name**	Tutor 6x86MX	P166 Multimedia Office System	Homebase K6	Representative	VS-200MX	Gold Edition	Multimedia PC	Tutor 166 M-System
	Price (inc VAT)	£774.33	£799	£799	£705	£799	£703.83	£799	£797.83
	Contact	0800 919556	0800 731 6150	0181 478 8700	01895 251619	0181 537 0037	01323 520111	01675 468 3333	01293 821333
Features & ratings	**Processor type**	6x86MX	Pentium MMX	AMD K6	Pentium MMX	6x86MX	Pentium MMX	AMD K6	Pentium MMX
	Processor speed equivalent (see note 1)	166	166	166	166	200	166	166	166
	Memory	16Mb EDO RAM	16Mb EDO RAM	32Mb EDO RAM	16Mb EDO RAM	32Mb SDRAM	16Mb EDO RAM	16Mb EDO RAM	16Mb SDRAM
	Hard disk	1.7Gb	2.5Gb	2.5Gb	2.1Gb	2.6Gb	2.6Gb	1.7Gb	2.5Gb
	CD-ROM	○	24x	24x	24x	24x	16x	8x	16x
	Sound card	○	16-bit	16-bit Sound Blaster compatible	Crystal 16-bit	Yamaha 32-bit Wavetable	16-bit Sound Blaster compatible	Yamaha 32-bit Wavetable	16-bit
	Speakers	○	unbranded	unbranded	unbranded	Altec Lansing ACS90	unbranded	unbranded	unbranded
	Graphics card	1Mb	2Mb	S3 Virge (2Mb)	Cirrus 2Mb	S3 Virge 4Mb	Cirrus 1Mb	1Mb	S3 Virge
	Case type	Desktop	Mini tower	Mini tower	Mini tower	Mini tower	Mini tower	Desktop	Desktop
	Monitor	14in	14in	15in	14in CTX	14in ADi	14in Hansol	14in	14in
	Modem	○	33.6Kbits/s	○	○	○	○	33.6Kbits/s	○
	Other								Joystick, USB
	Warranty	1 year on-site	1 year on-site	5 years return to base	1 year on-site	3 years return to base	1 year return to base	1 year on-site & 3 years return to base	1 year return to base
	Software	○	4 free Internet trials	Lotus SmartSuite 96	Lotus SmartSuite 97	Lotus SmartSuite 97 & Novell PerfectWorks	○	Lotus SmartSuite 96	MS bundle (costs extra)
	Mouse	Own brand	Logitech	Mitsumi	Mitsumi	Mitsumi	Genius	ALPS	Logitech
	Star rating	★★★	★★★	★★★★	★★★	★★★★★	★★	★★★★	★★★★
	BAPCo test results	148	134	172	126	202	133	137	130

Note: 1. Processor speed equivalent – the 6x86MX chips have a slower clock-speed than their counterparts but their performance is on a par.

2. Some of these PCs can be bought off the shelf from retail outlets as follows: Brother's Tutor 6x86MX is stocked by Norweb and some independent computer shops; Tashika's Multimedia PC is stocked by Software Warehouse shops throughout the UK; Tiny's Tutor 166 M-System can be bought at Tiny stores.

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

There is no doubt that the Synteq is the Best Buy from this group test. If you're looking for a budget PC, then speed is a critical factor, and the VS-200MX is a good 15 percent faster than any other machine tested here. It's well-built, well-specified and comes with an excellent software bundle: in short, a worthy winner.

Choosing a runner-up is more difficult. Despite its poor performance, Tiny's offering deserves an honourable mention as it's well-built and the only machine here to offer the extra future-proofing of USB ports. The Brother Tutor is fast for a 16Mb machine and comes backed by Brother's solid reputation, but the lack of a CD-ROM drive counts heavily against it. Although it's no flier, the Tashika Multi-media PC is perhaps the best-rounded system on test, with fair performance, a modem and a copy of SmartSuite.

However, the Paragon's performance and 15in monitor lift it above the pack, and so it's the machine that gets our recommendation.

John Sabine