

Nearly new PCs

Whether you're on a strict post-Christmas budget or simply aren't inclined to spend more than £1,000 on a system that will soon be outdated anyway, you've probably thought about checking the small ads. Good idea, but first let Scott Colvey give you a few pointers on buying inexpensive PCs that are almost as good as new

With doom and gloom surrounding the state of the world economy, it looks as though we could all be doing a bit of belt-tightening over the coming months. During times like these, people's minds turn to actively avoiding money-wasting purchases – and few buys can be more immoderate than splashing out on a flashy new computer. The unstoppable advance of technology means that newly bought PCs rapidly depreciate in value, rendering them close to worthless a short way down the line. While this is unfortunate for the owners, it can be great news for the thrifty shopper: if you know where to look, there are some real bargains to be had in the arena of hi-tech hand-me-downs. Better still, there's no reason why a secondhand PC shouldn't be every bit as functional and reliable as a brand-new model. With very few moving parts to break, the chances of a working computer developing a serious hardware fault are slim. Of course, pulled purse strings needn't be the only prompt to plump for a used PC. If you fancy the idea of having a second computer in the home – perhaps to enable you to work in the conservatory while the kids explore the internet from their bedroom – the secondhand market could provide an economical answer. With all that in mind we decided, for a change, to look at slightly older computers, rather than new. So, if you're fit for a PC steal, read on for *PC Advisor's* guide to the cash-saving world of computer cast-offs.

ILLUSTRATION: LEE HASLER

Is used for you?

A secondhand system probably won't offer the best introduction to PC newcomers. As well as being green to potential hardware and software problems, PC novices are those most likely to call on aftersales service and support – ingredients often found to be in short supply on the secondhand sales circuit. There *are* outlets where first-time buyers can expect to be well looked-after, but more on those presently.

On the other hand, you don't need to be particularly clued-up to enjoy the cost benefits of buying secondhand. If you know your way around Windows and are comfortable with the idea of adding and removing software applications and peripherals drivers, you're well set.

Processor is the key

If PCs have one major attraction, it's the ease with which they can be updated. Running low on storage capacity? Fit a

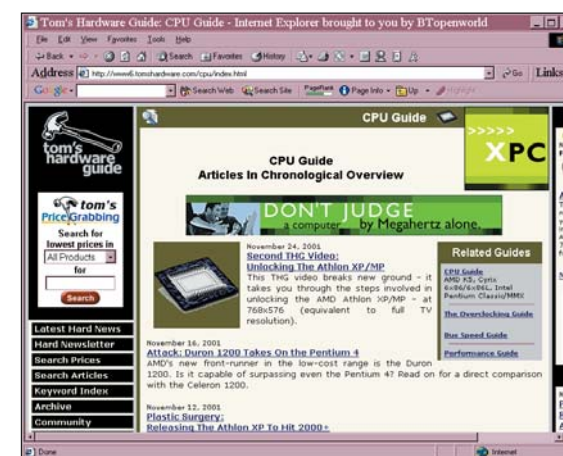
new hard disk. Bought a new application that demands more RAM? Slot in a couple of memory modules. Find that in-game visuals are beginning to crawl? Just add the latest whizz-bang 3D graphics card.

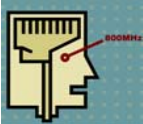
However, if your processor is looking a little long in the tooth, you'll be coming down to Earth with a bump. Almost every part of a modern PC can be quickly and easily ripped out and replaced by something more up to date, save for the processor. While these chips can be extracted simply, replacing them with something better is an altogether more daunting prospect. The potential number of permutations of processor, motherboard and

→ Tom's Hardware Guide has a huge processor section where you can read up on all you need to know

memory type is staggering (for more on motherboards see this month's *Technofile* on page 81 and our online installation guide at www.pcadvisor.co.uk/about/printplus.cfm).

If you don't want to take our word for it, click on technical guru Thomas Pabst's website (www.tomshardware.com). Explore the processor section and you'll find





Transferring software

If buying used hardware is full of pitfalls, the secondhand software market is simply littered with landmines. Perhaps the most important thing to note is that, when you buy a boxed software package, you're not really paying for the manuals and installation discs. In fact, the purchase you make is for a licence to use that software.

So far as it affects most consumers, software licences are sold as 'single use', meaning only one person is authorised to use a particular product on any one machine at any one time. In other words, if you're in possession of the licence, you – and you alone – are allowed to install and use the software.

If you're buying a used or refurbished PC from the likes of Dell or Morgan, you'll have nothing to worry about: respectable companies will ensure that any sale of a machine with installed software adheres to the terms of any licence(s). However, be cautious when shopping elsewhere.

a lifetime's worth of processor-related articles. You'd have to pore over these for many days in order to gen up on everything you'd need to know before attempting a processor upgrade and, frankly, life's too short.

In brief, if you only remember one piece of advice before dropping by the secondhand PC bazaar make sure it's that you target processor power over and above anything else. Small hard disks, limited memories and slovenly graphics performance can all be dealt with easily and effectively, but beefing up a computer's raw grunt is best left to geeks and masochists.

Hardware expectations

With those few caveats in mind, what kind of base hardware components should you be scouting for? The answer will depend largely on what you expect from your not-quite-so-new computer. Those who want to type the odd letter and get up to speed with the internet and email are going to be content with simpler (and hence cheaper) specifications than a buyer with their joystick hand poised ready for playing games.

Let's start by taking a look at the minimum specifications recommended by Microsoft for running its Windows operating system. For the latest version, Windows XP, the Seattle software supremo reckons you need to shop for a PC sporting at least a 300MHz processor,

128MB of memory and 1.5GB of available hard disk space (along with the obvious additions like a monitor, keyboard and mouse). Buy a secondhand system matching that checklist and Windows XP will indeed work, however it'll run so finger-drummingly slowly that you'll find it all but impossible to use.

You see, Microsoft (in common with every other software and hardware vendor known to mankind) is a little tight with the truth when it comes to minimum hardware requirements. In fact, to achieve anything like an acceptable performance, Windows XP demands a PC with considerably more oomph than a 300MHz processor and 128MB memory combination would provide. As a rule of thumb, you should double the minimum requirements outlined on the boxes of most modern software applications and, in the case of Windows, treble them.

What more do you need?

While we're thinking of minimum requirements, let's not forget a PC is often just the start of a computing journey – chances are you'll soon want to scan images and print documents. So can

→ Loot Compute has hundreds of secondhand computer adverts, so make sure you know what system you need before you look

If the vendor of the good PC deal you've found among the classified ads emphasises the huge amounts of software installed on the hard disk, it's important to consider the legal implications of such a sale.

Few people give a second thought to the origin of the applications on secondhand machines but, unless you're in possession of a valid licence, it is illegal to use the software. This isn't a technicality: despite what your mates down the pub might think, fire up an unlicensed program and you break the law.

Of course, whether or not you're likely to get caught is an entirely different matter. However, if you want to stick on the right side of the law, be sure to obtain the original licence agreements for each and every piece of software you're being sold. Once you have the licence(s), the onus is on the seller not to use any copies made elsewhere.

the secondhand market help out here, too? The simplest response is yes, of course: those upgrading to newer models are wont to selling their old kit on auction websites and in the small ads of local papers, so there are plenty of bargains to be had.

However, there are simply too many brands, models and varieties of peripheral to be able to offer specific buying advice in this feature. What's more, it's all too easy to get ripped off buying secondhand extras because the market directions and price movements of such items grab fewer headlines than the PCs they work with.

A classified advert proclaiming 'Photo-realistic inkjet printer: £80' might seem like a bargain to the uninitiated peripheral buyer, but these days most inkjet printers offer fantastic high-resolution colour output. Plus, with brand-new models



starting from around £40, do you really need to buy secondhand?

With printers, in particular, be wary when faced with older models or those of an unknown brand. If a machine sports a badge from one of the four market-dominating printer manufacturers – Epson, HP, Canon or Lexmark – then availability is pretty much assured. But with lesser makes you may struggle to find outlets selling compatible ink or toner cartridges.

Unavailability of consumables is not something that will affect secondhand scanners or digital cameras, no matter how old. However, finding suitable software drivers for outmoded kit can be a pain, especially if the device bears an anonymous marque. Should you happen upon a bargain that's simply too good to pass up, ensure it comes complete: you'll want full instructions and working installation and setup discs. You might also want to bookmark a section in our site (www.pcadvisor.co.uk/about/printplus.cfm), as we maintain a comprehensive list of web links to the latest drivers for a wide variety of hardware and software products.

By all means try to keep the peripherals price small by shopping secondhand but when it comes to brand names think big or, at the very least, familiar.

Bargain hunting

It's almost time to go shopping – but where, exactly? First stop: the classified section of your local newspaper. The selection is likely to be limited but with the advantage that any sellers will be in your neck of the woods. Check out the listed specifications and see if anything catches your eye.

For a wider selection of bargains, you'll have to ferret further afield. At any one

← eBay UK is an auction site with pictures for most lots, but beware of being outbid


time, a free-ad paper such as *Loot* carries hundreds of current adverts placed by people with secondhand computer gear to flog. Even if you make use of *Loot*'s online search facility (www.loot.com), the sheer number of adverts means making individual comparisons is a time-consuming affair. Have a fixed

idea about what hardware specification you're looking for – say, an 800MHz Pentium III with 128MB of memory and a 10GB hard drive – before scanning the ad

columns. This way, you'll find it easier to zero-in on the PCs of interest.


The real advantage of shopping online through a search facility is that you're bound to stumble across a few genuine bargains. Indeed, with so much choice, picking up something that exactly matches your needs shouldn't be a problem.

Auction websites such as eBay (www.ebay.co.uk) and QXL (www.qxl.co.uk) are a good bet, too. Along with their huge selections of online lots, most of which include photos of the products being offered for sale, these services maintain nifty vendor-rating systems. If you want the reassurance of dealing with a trustworthy seller you can limit your bids to items offered by users who have been praised by others.



Top 10 tips for buying secondhand

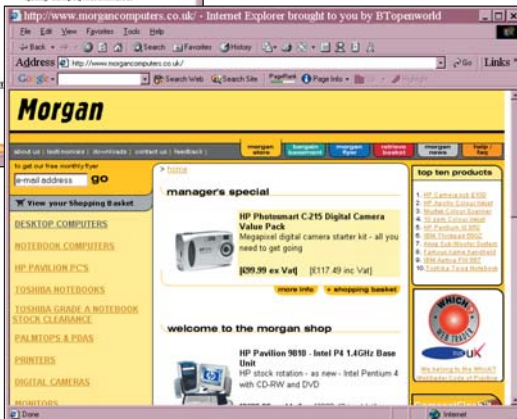
1. Power First and foremost, think processor power. Don't skimp here because upgrading later can be very tricky.
2. Stick to the list Before you start looking for a new system, draw up a list of minimum hardware requirements and stick to it when you go shopping.
3. Try before you buy Make sure you see the equipment working before you cough up any cash. It's your money, so demand an exhaustive demonstration.
4. Take a friend You're less likely to get fleeced if you have someone with technical nous in tow, so collar a knowledgeable friend and drag them along with you.
5. Middle man If your budget will stretch to it, your safest bet is to buy from a respected outfit like Dell or Morgan.
6. Going, going, gone If you decide to buy from an auction site, note when bidding on your chosen lot comes to an end. Many people leave it until the very last minute before submitting an auction-winning bid.
7. Complete peripherals Buying secondhand peripherals is fine so long as they come complete. Be wary of a seller who says you can download the software from the internet: it's far from a dead cert.
8. Shop around The secondhand market offers even more choice than the new, so compare, contrast and cogitate.
9. Bid carefully When making bids at an online auction, be certain of what it is you're vying for. With computer systems in particular, check that the deal includes monitor, keyboard and mouse.
10. Seek advice Speak to other people. If you have access to the internet, log on to our home page (www.pcadvisor.co.uk) and participate in some of the forums.





← Compaq offers a site for returned or refurbished PCs, but you'll have to bid for goods

↓ Morgan's website has a stock clearance section where you can pick up some great bargains



Naturally, as with any type of auction, the down side is that you can be outbid. Savvy online shoppers are practised at waiting until the very last moment before submitting auction-winning tenders, so keep your eye on the electronic gavel if you want to bag the real bargains.

One last outlet to consider is your place of employment: large companies regularly decommission ageing computer systems, either cannibalising the old machines for spares or dumping them. A sly lunchbreak visit to your firm's IT department and you might be able to sweet-talk someone into letting you walk away with some kit in exchange for a small contribution to company coffers; or even, perhaps, for free.

As one of the biggest computer manufacturers in the world, Dell can certainly be seen as a safe bet. The company runs an Outlet website (www.dell.co.uk/outlet), where it sells refurbished units at discount prices.

Martin Davies, general manager of Dell's asset-recovery business, reckons that offloading used or returned goods is good business sense. "Tight trading rules and regulations mean products returned to

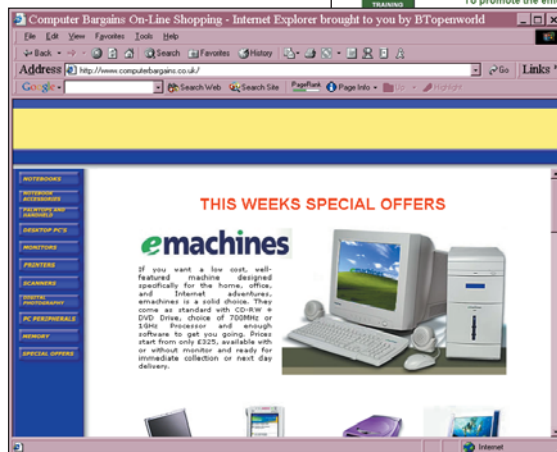
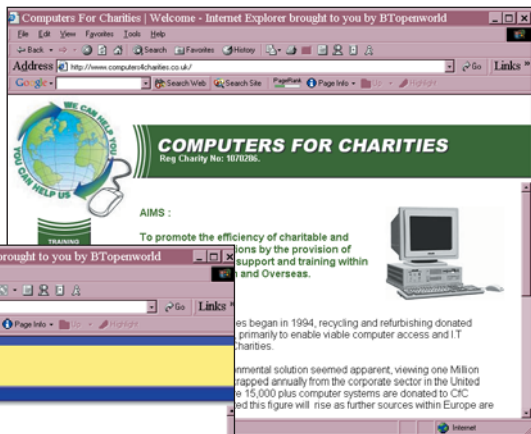
us as a result of cancelled or mixed-up orders cannot be resold as new, so we repackage them and place them for sale on the Outlet site. Most machines are less than three months old and the discounts average around 15 percent off the original price. We guarantee the product exactly as we would a new one."

Compaq is another well-known company offering returned and refurbished computer equipment for sale on the internet but, as the www.auctions.compaq.co.uk web address betrays, you may end up locked in a bidding war. Also, while Dell delivers full, as-new warranties with its seconds, Compaq's refurbished machines come with as little as 90 days cover.

Many mainstream PC vendors offer attractively priced refurbished systems, with varying levels of aftersales support. IBM (www.ibm.com/uk), for instance, lets customers tack support for refurbished PCs on to existing support contracts as well as certifying and installing them. Similarly, Computer Exchange (www.cex1.co.uk) offers a one-year warranty on all products bought, irrespective of whether it's a brand-new system or secondhand. It also claims to be more thorough in its hardware testing procedure than any other UK secondhand trader.

You'll also find secondhand kit in Dabs.com's Clearance Corner (www.dabs.com/products/clearancecorner.asp) and

→ Consider donating your old computer equipment to non-profit organisations such as Computers for Charities



← Computer Bargains has a Special Offers section that covers clearance items, ranging from PCs to personal digital assistants

The lap of luxury
Bought new, a notebook PC could well be one of the costliest things you'll ever cough up for. On the other hand, if you invest wisely in a secondhand device it can be an absolute steal.

Fresh from manufacture, a notebook carries a hefty price premium: like luxury cars, you're paying as much for kudos as refined components. And, just like the car market, the value of a brand-new portable drops sharply the moment you walk out the shop door.

For some people, only the best will do. And as these fickle followers of fashion move on to the latest and greatest portable machines, they offload their old ones on to the secondhand market. The upshot is that it's possible to save a small fortune on a notebook purchase by settling for a used machine – but you must be very careful.

While most aspects of desktop computers can be quickly (and relatively cheaply) repaired, few notebooks come with

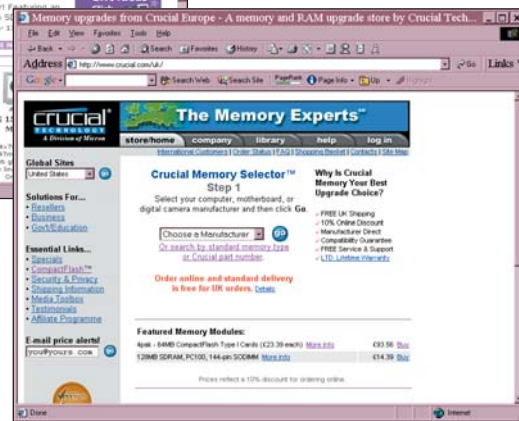
such assurance. Moreover, upgrading a notebook computer is generally a complete no-no. Components that can be easily transplanted in a desktop casing are often impossible to access in notebook shells. Surely, the processor you buy on day one will be the same one you'll be using three years down the line. The same will probably be true of the hard disk. Notebook memories, too, can be arduous to update. The required modules might be proprietary, and they're sure to be more expensive than their desktop equivalents.

When considering a secondhand notebook, it's vital to examine the screen in detail. The LCD (liquid crystal display) panels used in notebooks are prone to faulty pixels and, if one goes, aside from being terribly distracting, it could be the harbinger of further failures.

Have the seller show you full-screen displays of one colour (in red, green, blue and white), as this will highlight any dead pixels hidden within the notebook's screen.



← Memory is cheap at the moment, so hunt around. Crucial Technology and PC World are good places to start



Watford Electronics' B-Grade Stock area (www.watford.co.uk), where outdated and ex-demo goods are discounted.

Both businesses and individuals who need to keep IT costs low will find their equipment needs well catered for with companies such as Livingston (www.livingston.com) that specialise in selling on unwanted, but not necessarily outdated, kit. Livingston director and general manager, Nick Grainger, claims: "Our flexibility in offering secondhand equipment means we can offer products that deliver results in the short and long term." The company claims its inventory of products is often only six months old.

Morgan (www.morgancomputers.co.uk) and Computer Bargains (www.computerbargains.co.uk), both of which are worth

a look, specialise in 'remaindered' (in other words, end-of-the-line) stock from big-name brands.

Will I be stuck with what I've got?

PCs are made for upgrading so, even with an older system, you don't have to get left behind as technology progresses. However, as we said earlier, we'd strongly advise against buying a secondhand machine with the thought of upgrading the processor at a later date. Besides, a computer's processor is just one part of the performance story.

So long as you start with a capable processor (for instance, 700MHz or above) then memory can be just as important to the overall speed of operation. Firms like Crucial (www.crucial.com/uk) are currently knocking out 256MB memory modules for well under £30, so upgrading RAM has never been cheaper. The same is true of hard disk storage, with PC World (www.pcworld.co.uk) selling good-capacity (30GB) drives for under £100.

End game

You should now know all you need to shop safely for secondhand computer gear. Of course, it's possible that you're buying to replace an older system of your own. If that's the case, you might want to sell it using one of the avenues discussed here. If you think your existing computer is valueless, or you cannot be bothered trying to sell it, don't throw it away. A local school might be grateful for the gift of a free PC, even if it is a little aged.

Alternatively, consider donating your elderly system to Computers for Charities (www.computers4charities.co.uk), a non-profit organisation that distributes discarded, unwanted computers to all parts of the world. ■



For a comprehensive list and links to printer driver updates, go to www.pcadvisor.co.uk/about/printplus.cfm