

TOP 10 POWER AND BUDGET NOTEBOOKS

Power notebooks		Last month's position	First reviewed	World-Bench 4	Price	Warranty	Processor type/clock speed	RAM	Hard disk capacity	Modem	Network card	Dimensions (width x depth x height)		Weight	Screen size/type	Maximum resolution	Graphics card	Graphics memory	Dual-speed processor	DVD drive speed	Internal/external floppy disk drive	CD-RW read/write/rewrite rate	Battery type	Operating system & other extras
1	Compaq Evo N600c 0845 270 4222 www.compaq.co.uk	2	Feb 02	103	£1,537	3-year parts and labour	Intel Mobile Pentium III/1.06GHz	128MB	20GB	56K	Y	305x249x30mm		2.7kg	14.1in/TFT	1,024x768	ATI Radeon Mobility	16MB	Intel Speedstep	8x (combo drive)	N/A	N/A	lithium-ion	Windows 2000 Professional
2	Rock Agenda Si 0870 908 888 www.rockdirect.com	NEW	Mar 02	99	£1,599	3-year collect and return	Intel Pentium III/flip chip 1.2GHz	384MB	30GB	56K	Y	310x265x40mm		3.4kg	15.1in/TFT	1,024x768	SIS 630S	variable	Intel Speedstep	N/A	internal	20x/4x/4x	lithium-ion	Windows XP Professional
3	Sony Vaio PCG-GR215MP 0870 542 4424 www.vaio.sony-europe.com	NEW	Mar 02	96	£1,957	1-year return to base	Intel Mobile Pentium III/1GHz	256MB	30GB	56K	Y	325x270x37mm		3.15kg	15in/TFT	1,024x768	ATI Radeon Mobility	16MB	Intel Speedstep	8x	optional	24x/8x/4x	lithium-ion	Windows XP, Sony Utilities, Adobe Premiere, PictureGear
4	Sony Vaio PCG-R600 0870 542 4424 www.vaio.sony-europe.com	NEW	Mar 02	76	£1,701	1-year return to base	Intel Mobile Pentium III/850MHz	128MB	20GB	56K	Y	280x239x23mm		1.7kg	12.1in/TFT	1,024x768	Intel 815EM	11MB	Intel Speedstep	8x	external	24x/8x/4x	lithium-ion	Windows XP Pro, Sony Utilities, Adobe Premiere, PictureGear
5	IBM ThinkPad A30p 0800 169 1458 www.ibm.com/pc/europe/thinkpad	NEW	Mar 02	95	£2,788	3-year return to base	Intel Mobile Pentium III/1.2GHz	128MB	48GB	56K	Y	329x273x45mm		3.5kg	15in/TFT	1,600x1,200	ATI Radeon Mobility	32MB	Intel Speedstep	6x	optional	24x/4x/4x	lithium-ion	Windows XP Professional
Budget notebooks																								
1	Mesh Pegasus 14.1 Pro 020 8208 4702 www.meshcomputers.com	NEW	Mar 02	82	£1,049	2-year return to base	AMD Mobile Athlon 4/1.2GHz	384MB	20GB	56K	Y	308x254x38mm		3.0kg	14.1in/TFT	1,024x768	S3 Twister K	user-definable	AMD PowerNow	8x	internal	N/A	lithium-ion	Windows XP Home, Microsoft Works Suite 2002
2	AJP 7321 020 8208 9700 www.ajp.co.uk	NEW	Mar 02	85	£1,099	1-year return to base	AMD Mobile Athlon 4/1.1GHz	384MB	20GB	56K	Y	310x265x40mm		3.2kg	14.1in/TFT	1,024x768	S3 Twister K	user-definable	AMD PowerNow	8x	internal	24x/4x/4x	lithium-ion	Windows XP Home, Microsoft Works 6.0
3	Rock Sigma Si Combo 0870 908 888 www.rockdirect.com	NEW	Mar 02	84	£1,199	1-year collect and return	Intel Pentium III flip chip/1.2GHz	256MB	30GB	56K	Y	308x254x38mm		3.2kg	14.1in/TFT	1,024x768	SIS 630S onboard	user-definable	N/A	8x	internal	20x/4x/4x	lithium-ion	Windows XP Home, McAfee AntiVirus
4	Pico Systems Scholar 7521 0870 729 6111 www.picosystems.co.uk	NEW	Mar 02	85	£1,289	1-year parts and labour	Intel Pentium III flip chip/1.2GHz	384MB	20GB	56K	Y	310x266x40mm		3.4kg	15.1in/TFT	1,024x768	SIS 630S onboard	user-definable	N/A	6x	internal	24x/4x/4x	lithium-ion	Windows XP Professional
5	ACI Perfecta 020 8830 1958 www.aciplc.com	NEW	Mar 02	62	£999	1-year return to base	Intel Pentium III flip chip/1GHz	192MB	20GB	56K	Y	322x277x38mm		3.2kg	14.1in/TFT	1,024x768	S3 Twister K	user-definable	N/A	8x	internal	N/A	lithium-ion	Windows XP Home, Lotus SmartSuite Millennium Edition

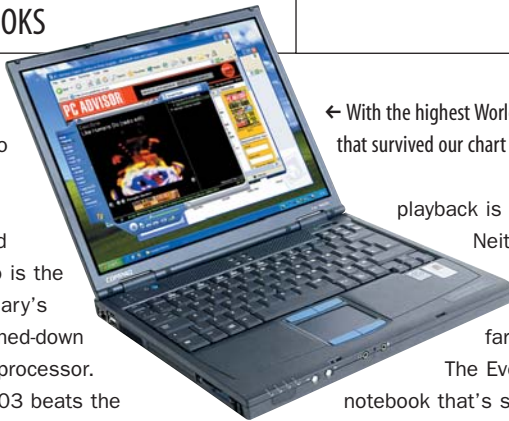
TOP 10 POWER NOTEBOOKS

1 Compaq Evo N600c

Last month, Compaq's Evo N600c confounded all our expectations. This month, thanks to a new scoring system and WorldBench 4 testing suite, the Evo is the one remaining notebook from February's top five. Within the Compaq's slimmed-down exterior lies a 1.06GHz Pentium III processor. The Evo's WorldBench 4 score of 103 beats the Recommended 1.2GHz Rock and, because it weighs 2.7kg, only the Sony Vaio PCG-R600 is lighter. In terms of graphics, the Radeon Mobility card will maximise frame rates, making this one notebook that won't falter on 3D graphics. The N600c's 14.1in screen may not be as large as Rock's model, but the colour scheme and character definition are second to none.

The Compaq's multiport facility lets you add modules to increase functionality. You could beef up the security, for example, or add a wireless LAN (local area network) card for increased connectivity. This is an excellent feature, as it means that the customer pays for as much or as little as they want to use.

Storage and drives on the Evo aren't that generous: the 20GB hard drive is hardly the most capacious and, although DVD



← With the highest WorldBench 4 score, Compaq's Evo N600c is the only notebook that survived our chart refresh

playback is provided, CD-RW and floppy drives are absent. Neither is the software bundle particularly impressive, although the three-year Europe-wide warranty ensures you are safe however far you travel on the continent.

The Evo N600c is an affordable, high-performance notebook that's slim and light enough to remain portable, but is equally desktop-friendly. The range of options make it flexible enough to meet all business needs and, although the Rock Agenda's CD-RW drive may gain it some admirers, the Compaq is the overall winner in our Top 10 Power notebooks chart.

2 Rock Agenda Si

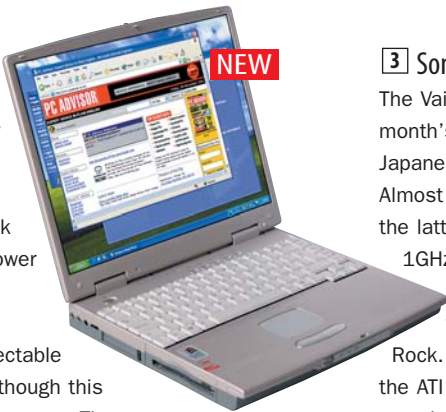
The Rock's excellent all-round performance and specifications helped it gain our Recommended award. Rock notebooks are superb value for money, and the Agenda is no exception with a tempting £1,599 price tag. Flying in the face of the well-established theory that low price means low-quality components, the Si squeezes in a 1.2GHz Intel Pentium III processor. Memory is often a crucial factor in

→ The Rock Agenda Si offers a great all-round performance with an excellent price tag, making it a worthy winner of our Recommended award

guaranteeing smooth notebook performance, and no other Power model was able to match the Agenda's 384MB of RAM.

The Rock achieved a respectable WorldBench 4 score of 99, although this can't beat the chart-topping Compaq. The reason for this could be the onboard SIS graphics controller, which has no memory of its own and uses the main RAM instead. This is the one weak link in the Agenda's hardware setup and is a shame because the 15.1in TFT (thin-film transistor) screen offers clear image reproduction – even if the maximum resolution support is curtailed by the onboard graphics. Audio is strong, though, and Rock's CD-RW facilities are excellent. The range of ports and connectors is adequate, but for up-to-date additions such as FireWire look elsewhere. There's little in the way of software, although the three-year warranty is welcome.

The Rock Agenda is about value for money, and with top performance, a large screen and invaluable CD-RW facilities thrown in, this is a worthy runner up to the Compaq.



3 Sony Vaio PCG-GR215MP

The Vaio PCG-GR215MP is the first of two Sony entries in this month's Power chart. There's not much you could teach the Japanese electronics giant about designing a stylish notebook. Almost twice the weight of Sony's R600, the GR215MP retains the latter's refined curves, but boasts more power, pairing a 1GHz Intel Mobile Pentium III chip with 256MB of RAM.

Traditionally, Sony notebooks have lagged on speed, but this Vaio keeps within three WorldBench points of the Rock. Graphics performance is impressive, with the ATI Radeon Mobility complementing the 15in screen.

As with all Sony notebooks, there's a host of extra utilities, plus plenty of ports and connectivity options. The CD-RW is another smooth operator, with eight-/four-speed CD-R/RW

→ Sony's Vaio is a gorgeous design, but its heavy price prevents it from climbing higher in the chart



See page 34 for a review of Hi-Grade and AJP's latest notebooks, which came in too late to be included in our Top 10 charts

functionality. The lack of a floppy drive is frustrating, though, and the one-year warranty is only return to base. The Vaio's major flaw is its price – balanced specifications and stylish case construction may not be enough to justify the extra £400 you must pay for the privilege of owning a Sony.

4 Sony Vaio PCG-R600

The Sony Vaio remains the epitome of chic and ultra-portable computer technology. Its slim curves and 1.7kg frame (without the docking station, floppy and CD drives) still makes it the number one choice for the well-heeled executive. This slender case means a compromise on specifications, though, as its 128MB of RAM and 850MHz Pentium III chip pulled in a WorldBench score of just 76. However, there's more than enough processing power here for most tasks. The docking station has been upgraded to include CD-RW facilities and the extras include iLink (Sony's FireWire equivalent), Memory Stick storage medium, and a bundle of software utilities. There's no doubt that you can get better value elsewhere – the 12.1in screen, although colourful, makes for a cramped workspace – but the price tag is no longer exorbitant.

↖ The Sony Vaio PCG-R600 is the lightest Power notebook in the chart

5 IBM ThinkPad A30p

A heavyweight in all areas except the ones that matter, IBM's ThinkPad offers brute force without refinement. Its most astonishing feature is the price tag – almost twice that of the Rock and Compaq models – although it also piles on more pounds than its competitors. IBM could argue that the processor – a spanking-new 1.2GHz Mobile Intel Pentium III – pushes up the price. But despite its speedy chip, the WorldBench 4 score isn't that high and the low memory configuration is probably the cause.

The extra money doesn't go entirely to waste – the robust casing and mammoth keyboard earn their keep, while the superior ATI Radeon Mobility graphics musters high frame rates in graphical applications. The feature-laden ThinkPad (which also comes with a CD-RW drive) is well connected, and the Ultrabay facility enables you to connect a number of accessories – Bluetooth, for example – or high-quality microphone facilities.

Nonetheless, with such an overwhelming price tag you're going to have to take your mobile communications extremely seriously to give the IBM ThinkPad a whirl.

↖ The IBM ThinkPad's extortionate price tag means it fails to hit the mark

TOP 10 BUDGET NOTEBOOKS

1 Mesh Pegasus 14.1 Pro

Our coveted Best Buy goes to the Pegasus 14.1 Pro, which is a well-considered package at a great price. Although the Mesh machine couldn't match the WorldBench 4 performance of its competitors and suffers from lack of a CD-RW drive, it has many redeeming features. Microsoft Works Suite 2002 is a useful software addition and the hardware is protected by a generous two-year warranty.

The Mesh's plain metallic design isn't a head-turner like ACI's Perfecta, but it's a sturdy model with plenty of beauty on the inside. At the heart of the Pegasus is AMD's relatively new Mobile Athlon 4 processor, running at a speed of 1.2GHz, twinned with 384MB of SDRAM. As the WorldBench 4 score of 82 demonstrates, there's little difference in performance between Intel's and AMD's notebook processors. However, the Pentium IIIs in the Budget chart aren't the mobile version and don't have dual-speed capabilities (for more on this see *Mobile processors: AMD fights back*).

A 20GB hard drive is standard and the Pegasus comes with enough ports to make it a decent desktop replacement, although we'd like to see the

↖ Mesh's Pegasus has a low WorldBench score, but it's a good desktop replacement

2 AJP 7321

The Recommended 7321 is very similar in looks and setup to our Best Buy but misses the top spot because it can't match the warranty, software bundle or price.

That said, the AJP is good value for money and a powerful performer. An ample 384MB of SDRAM is combined with an AMD Mobile Athlon 4 processor and 20GB hard drive. At 1.1GHz, the clock speed is 100MHz slower than most of the competition in the Top 10 chart but that didn't stop it tying in first place for the quickest WorldBench 4 score.

One advantage the 7321 has over our Mesh winner is the inclusion of a combination drive. The eight-speed DVD player also doubles up as a CD-RW drive, which is a sensible choice as there's rarely room on a notebook for two drives unless one is external – completely self-defeating when it comes to mobility.

This also means that the AJP offers decent backup capabilities.

↖ AJP's 7321 is a powerful machine that offer good value for money

Mobile processors: AMD fights back

AMD has previously missed out on a decent chunk of the lucrative mobile computing market but hopes to make amends with the Mobile Athlon 4 processor. It was introduced in May last year, but has only just starting to take root in the business and consumer markets. We've only seen a few devices opting for this processor so far, but the inclusion of this chip in two Top 10 Budget notebooks this month illustrates that manufacturers are starting to take note.

AMD's earlier mobile chips (based on a different architecture) couldn't reach the same level of performance that Intel offered, and were only good for those on the tightest budget. However, these processors did introduce AMD's

superior PowerNow technology. While Intel provides two fixed speeds in its Speedstep processors, AMD's PowerNow technology lets users choose from up to 32 possible speeds. It also lets you opt for an automatic setting that scales the frequency up and down to match the needs of the programs you're running. This provides the optimal balance of performance and battery life.

The Mobile Athlon 4 processor incorporates PowerNow and comes with a new Palomino core which pushes the performance up on a level pegging with the Intel Mobile Pentium III chip. As you can see from our results, the Athlon has no problem keeping up with the Intel-based machines.

The 7321 is well equipped for desktop replacement, covering most of the ports necessary for optimal connectivity except FireWire. The AJP also utilises the prevalent 14.1in TFT (thin-film transistor) display and the user-definable graphics memory can be pushed up to 64MB.

3 Rock Sigma Si Combo

Despite only having 256MB of SDRAM, Rock almost managed to squeeze the same WorldBench 4 performance out of the Sigma as its rivals with 384MB. The score of 84 proves this notebook is no slacker when it comes to coping with day-to-day applications. Powering the Combo system is a 1.2GHz Pentium III flip chip, while offering plenty of power it doesn't have the advantage of dual-speed technology that the Speedstep technology found in mobile chips offers. As a result, the battery life on the Sigma isn't as long and may be prone to overheating. On saying this, we didn't experience any problems in our tests.

Rock opted for a 30GB hard drive that's been specially designed as a silent runner, so operating noise is reduced. The combination DVD/CD-RW drive is a great addition and a FireWire port has also been included. However, you'll need the USB connections for other devices because there's no serial port.

4 Pico Systems Scholar 7521

The Pico's expensive price tag kept it from a higher chart position, but there's still a lot to recommend on this model. With a 1.2GHz Pentium III flip chip processor, 384MB of SDRAM and 20GB hard drive, the Scholar tied with AJP for the fastest WorldBench 4 score. The 7521 is definitely a speedy number, but it suffers from the generic problems associated with the flip chip.

The combination DVD/CD-RW drive is a good addition and an array of ports makes it a versatile desktop replacement – despite the lack of FireWire connectivity.

The Scholar houses an excellent 15.1in screen, with the lid overhanging the base of the notebook to accommodate its size. It's also the only competitor in the Budget notebook chart to come with Windows XP Professional rather than XP Home, which is perfect for business use. Shame there's no additional software to go with the package.

5 ACI Perfecta

If this chart was solely based on looks, the Perfecta would win hands down. The sleek, dark blue case has a corrugated steel-effect strip running along the back and the buttons on the front of the notebook mean you can use the CD drive to listen to music without powering it up. The ACI is also the cheapest option in the chart with a useful software bundle.

While it's unquestionably capable of everyday tasks, however, a few extra pounds will get you a better bargain. A 1GHz Pentium III flip chip processor, 20GB hard drive and 192MB of SDRAM couldn't equal the performance of other notebooks. The WorldBench 4 score of 62 reflects the lower specifications. The display and graphics are on par with the competition and the eight-speed DVD player is handy but there's no CD-RW drive. To be fair, though, the Perfecta joins Rock's Sigma for the best selection of ports.

→ ACI's Perfecta is gorgeous to look at, but its performance fails to compete with the other budget notebooks

