

HOW TO BUY A **BLAZING** GAMING LAPTOP

ANNUAL
EDITORS'
AWARDS
ISSUE

COMPUTER SHOPPER[®]

THE
BEST in
TECH!

- ▶ LAPTOPS
- ▶ DESKTOPS
- ▶ SOFTWARE
- ▶ CAMERAS
- ▶ PRINTERS
- ▶ LCDs
- & MORE!

TOP
100

Products
of the Year



SY2
Media Labs

COMPUTERSHOPPER.COM

NOVEMBER 2008 DISPLAY UNTIL NOV. 10, 2008



U.S. \$5.99



Introducing Sager's Turbocharged Gaming Machines...



HP
9262

- 17.0" WUXGA Display (1920x1200) with Super Clear Glare Type Screen
- Intel® Core™ 2 Duo Processor Q9550 (12MB L2 Cache, 2.83GHz, 1333MHz FSB)
- 1GB DDR3 NVIDIA® GeForce™ 9800M GTX PCI-Express™ Graphics
- 512MB DDR3 NVIDIA® GeForce™ 9800M GT PCI-Express™ Graphics (optional)
- 512MB DDR3 NVIDIA® Quadro® FX 1600M PCI-Express™ Graphics (optional)
- Dual Graphics SLI™ technology Capable
- 4GB Dual Channel DDR2 SDRAM at 800MHz
- 200GB 7200RPM SATA-300 Hard Drive
- 8X DVD+RW/RW 4X+DL Super Multi Drive
- Hardware RAID 0, 1, 5 Function
- One Optical Device and 3 Hard Drives Coexisting Capable
- Full sized Keyboard with Numeric Keypad
- Intel® WiFi Link 5300AGN Wireless LAN
- Integrated Bluetooth V2.0 Wireless
- Built-in 2.0M High-Res. Video Camera
- Built-in 7-in-1 Card Reader
- Genuine Windows Vista™ Home Premium
- Microsoft Office™ Ready with free 60-day trial

\$2999

HP
5796

- 17.0" WUXGA Display (1920x1200) with Super Clear Glare Type Screen
- Intel® Core™ 2 Duo Processor T9400 (8MB L2 Cache, 2.53GHz, 1066MHz FSB)
- Intel® WiFi Link 5300AGN Wireless LAN
- 1GB DDR3 NVIDIA® GeForce™ 9800M GTX PCI-Express™ Graphics
- 2GB Dual Channel DDR3 SDRAM at 1066MHz
- 320GB 7200RPM SATA-300 Hard Drive
- 8X DVD+RW/RW 4X+DL Super Multi Drive
- Full sized Keyboard with Numeric Keypad
- Integrated Bluetooth V2.0 Wireless
- Built-in 2.0M High-Res. Video Camera
- Built-in Fingerprint Reader
- Intel® Turbo Memory support 2.0 (optional)
- 1 SATA, 1 FireWire, and 3 USB 2.0 Ports
- Built-in 7-in-1 Card Reader
- HDMI output for High-Definition Video
- Available in Orange or Silver color Trim
- Genuine Windows Vista™ Home Premium
- Microsoft Office™ Ready with free 60-day trial

\$2699


Sager recommends Microsoft® Windows Vista™ Ultimate

Call us toll-free at:

800.669.1624

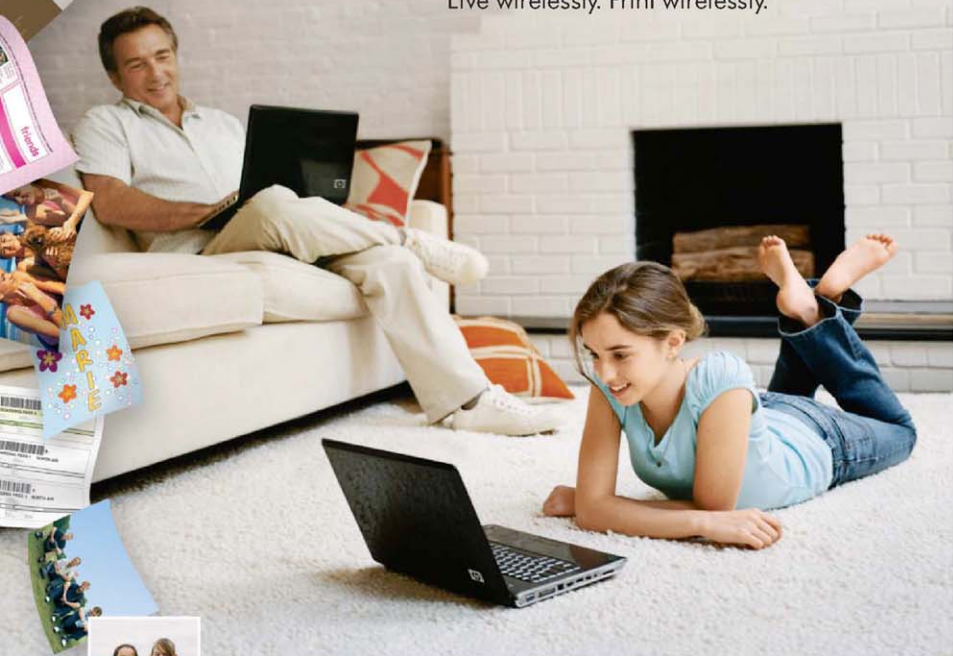
For up-to-the-minute pricing and ordering information:

sagernotebook.com



PRINT FROM ANY ROOM, OR AGE, IN THE HOUSE.

Live wirelessly. Print wirelessly.



NOW SAVE \$70 when you buy an HP wireless printer with any notebook. hp.com/go/hpwireless

Available at Best Buy, Circuit City, Office Depot, OfficeMax and Staples.

WHAT DO
YOU HAVE
TO SAY?



©2008 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. Wireless access point and Internet service is required and not included. Availability of public wireless access points is limited. Wireless performance is dependent upon physical environment and distance from access point. Mail-in or instant rebate depending on qualifying retailer, while supplies last.

Features

61

100 Best in Tech 2008

Our mega-roundup offers the best of the best of this year's tech products. See our choices for the top desktops, laptops, components, peripherals, mobile gear, software, Internet resources, and much more. Also, see what topped our list as the product and the technology of the year.

76

Get Your Game On, On the Go

Forget about chaining yourself to a desk just because you want to play the latest 3D game—today's gaming laptops are as powerful as they are portable. We look at five locked-and-loaded systems ready to fire up whenever and wherever you are.



84

Road-Ready Gear

Traveling for work can be harrowing—make it easier by packing some efficient tech essentials. These accessories help you create a mobile office wherever you are.

New Products

PCs

- 16 Asus Bamboo
- Dell Inspiron 9 Mini
- iBypower Gamer Paladin 998
- Samsung X360
- Shuttle X27
- Sony VAIO LV High-Definition PC/TV

BUILD YOUR OWN

- 95 AeroCool US Modern-V
- Arctic Cooling Fusion 550R
- Scythe Hard Disk Stabilizer x4
- SilverStone TJ10 Nvidia Edition
- Spire SilverBlaze Video Graphics Array Cooler
- Zalman GS1000



16

Help & How-To

COMPUTER CURES

- 89 Shopper's computer doctor takes a look at troubleshooting during connecting a DISH Network box, hooking a turntable up to a PC without a USB connector, and dealing with an annoying "6-to-4 Adapter" hiccup.

WEEKEND PROJECT

- 92 Replace Your Laptop's Hard Drive
Whether it's dead or full, replacing your laptop's hard drive is easy. Our five-step primer will get you up and running again in a flash.

BUYING BASICS

- 98 How to Buy the Right Multifunction Printer

GEEK SPEAK

- 102 What are anti-aliasing and anisotropic filtering?

TOP 5

- 55 Gaming Desktops
- 56 Performance Graphics Cards
- 58 DVD- and Video-Editing Programs

Reviews

DESKTOPS

- 22 Acer Aspire X1200
- 22 HP Compaq dc5850
- 24 iBypower Gamer Fire 294
- 24 Shuttle KPC K4800

LAPTOPS

- 20 Asus Eee PC 1000H
- 26 HP Compaq 6730b
- 26 Lenovo ThinkPad SL400
- 29 Acer Aspire One
- 30 Fujitsu LifeBook A6210
- 30 HP Pavilion dv5t

COMPONENTS

- 32 Raidmax IceCube
- 32 Chieftec CH-05
- 33 Asus EAH4870X2
- 33 Gigabyte MA790GP-DS4H

NETWORKING

- 34 Netgear Wireless N Upgrade Kit (WNEB3100)

PERIPHERALS

- 35 Buffalo MiniStation DataVault
- 35 Maxtor Black Armor

DISPLAYS

- 36 Samsung SyncMaster 305T
- 36 ViewSonic VX1962wm

PRINTERS/SCANNERS

- 40 Brother MFC-6490CW
- 40 HP Photosmart A636 Compact Photo Printer

CAMERAS

- 21 Olympus E-3
- 43 Casio Exilim EX-Z200
- 43 Nikon Coolpix S210

CONSUMER TECH

- 44 Audio-Technica QuietPoint ATH-ANC3
- 44 Bymotic HF2 Headset + Earphones

GAMING

- 46 GoLive2 Strix 200
- 46 LeapFrog Leapster2

SOFTWARE

- 50 Sony Vegas Movie Studio 9.0 Platinum Edition
- 52 Corel VideoStudio Pro X2
- 52 System Mechanic 8

Trends

- 11 Microsoft, watch out! Google has launched a new attack, and this time it's taking on Internet Explorer. Also, see how Intel and Yahoo plan to introduce Web-like features on your TV set, and why Blu-ray may succeed after all.

Departments

- 6 Editor's Note
- 100 Spotlight
- 101 Ad Index



Toshiba recommends
Windows Vista® Business

innovation is thin with an optical drive.



The laptop expert cut down on size, not features.

Sure, there are companies out there yelling "thin this" and "portable that." But what good is a lightweight laptop if it doesn't do what you want? That's why the featherlight Portégé® R500 is the world's first laptop with a 7mm DVD SuperMulti drive. So you can still watch movies, play music and prepare for presentations. Plus its transreflective screen uses natural light to help you see better outdoors.

Discover all of the innovative world's firsts inside the Portégé R500 at Explore.Toshiba.com/CS.



Portégé is a registered trademark of Toshiba America Information Systems, Inc., and/or Toshiba Corporation. Windows Vista is a registered trademark of Microsoft Corporation in the United States and/or other countries. While Toshiba has made every effort at the time of publication to ensure the accuracy of the information provided herein, product specifications, configurations, prices, system/component/options availability are all subject to change without notice. For the most up-to-date product information about your computer, or to stay current with the various computer software or hardware options, visit Toshiba's Web site at pcsupport.toshiba.com. ©2008 Toshiba America Information Systems, Inc. All rights reserved.

TOSHIBA
Leading Innovation >>>

New Look, New Features @ ComputerShopper.com

Easy access
to product advice,
tech help, and buying
recommendations.

COMPUTER SHOPPER

Bring your media up to date with your life

Search | **Reviews** | Best Prices | Top Products | How to | Buying Guides | Downloads | News | Blog | Subscribe

Gateway P-171XL FX Edition

Desktop
Laptops
Components
Graphics Cards
Peripherals
Printers
Networking
LCD Monitors
Hard Drives & Burners
Software
Digital Cameras & Camcorders
Cell Phones
GPS
MP3 Players
HD TVs & Home Theater

PROS
Impressive performance; full 1080p HD screen; HD DVD player

CONS
Does not burn HD DVDs; test unit did not include HD DVD player adapter

EDITOR'S TAKE
Gateway brings its FX line to the notebook arena with the P-171XL, a top-performing machine with a reasonable price for its class.

Key Specs
Processor: 2.8GHz Core 2 Extreme X7900
Memory: 3GB (2007)

User Rating
Average User Rating: **3.5**
Rate this product: ☐ 1 star ☐ 2 star ☐ 3 star ☐ 4 star ☐ 5 star

User Reviews
To write a review you must log in or register here
User Name: Remember me ☐
Password:
There are no user reviews for this product. Be the first to review it.

Related News Stories

Most Popular

- 32GB Crucial Solid State Internal 2.5-Inch Drive
- Acer Aspire L310 Desktop Review
- HP Compaq 6730 Laptop
- HP Pavilion Slimline s7000
- MSI Wind U100
- 3Compenet SpeechNavigator
- Epson EX50 Multimedia Projector
- Alienware Avion SL ALX Crossfire
- Lenovo Ideapad Y510 Laptop
- Dell Studio Hybrid Desktop

Top User Rated

- Acer Aspire L310 Desktop Review
- HP Compaq 6730 Laptop
- 32GB Crucial Solid State Internal 2.5-Inch Drive
- HP Slimline s7000 with Windows Vista Desktop
- HP Pavilion Elite m9200 Desktop
- Asus Premier E Elements 4

Help & How-To
2008 PC Buying Guide
Build a PC for \$150
Overclock Your PC

Get help and
advice from our
bustling online
community.

On every page,
see the most
popular stories
on our site at a
glance!

Check out the
stories you and
your fellow
readers rated
the highest!

Agree
or disagree
with us? Rate
the products
we reviewed
yourself!

Make your
voice heard! Join
ComputerShopper.com,
and you can write
your own reviews!

NOVEMBER 2008 VOLUME 28 NUMBER 11 ISSUE 344 Computer Shopper (ISSN 0886-0556) is published monthly, for \$24.97 per year in the U.S. and \$54.97 per year outside the U.S., by SX2 Media Labs, LLC, 72 Madison Ave., 10th Fl., New York, NY 10016. Periodicals Mail postage paid at New York, NY, and at additional mailing offices. Publications Mail Agreement No. 4009522. POSTMASTER: Send address changes to Computer Shopper, P.O. Box 52545, Boulder, CO 80322-2545. Return undeliverable Canadian mail to P.O. Box 505, RPO West Beaver Creek, Richmond Hill, ON L4B 0K6. Portions of Computer Shopper are published under license from CNET Networks, Inc., San Francisco, CA, USA. Editorial material appearing in Computer Shopper that was originally published on www.cnet.com, www.download.com, or www.newsworld.com is the copyright property of CNET Networks, Inc., or its suppliers. Copyright © 2008 CNET Networks, Inc. All rights reserved. "CNET" is a trademark of CNET Networks, Inc. All other content Copyright © 2008 SX2 Media Labs, LLC. All rights reserved. Permission to use Computer Shopper content is granted on a case-by-case basis. SX2 Media Labs welcomes requests. Please direct inquiries to our Reprint Coordinator at Wingle's Reprints: 1-877-652-5295. "Computer Shopper" is a trademark of SX2 Media Labs, LLC.

PRINTED IN THE U.S.A.



SETTLING ON THE TOP 100 tech products of the year—an annual *Computer Shopper* ritual as inevitable as rain in Redmond—is always a good-natured brawl. After the dust settled, I settled back at my desk, and my eye rested on a much-loved, much-worn object.

Since the late 1990s, I've relied on an ingenious little laptop—NEC's MobilePro 880, a Windows CE-based bantamweight—that uncannily resembles our Top 100 Product of the Year. Call it legacy tech that was 10 years ahead of its time: It turns on and off quickly, uses rugged solid-state memory (granted, just a few megabytes), and does Wi-Fi (aided by a particularly understanding PC Card). With a decent keyboard and 9.4-inch touch screen, it's just right for commuting or meetings. And it was one of a kind—until now, as “The 100 Best in Tech 2008” (p. 61) makes clear.

What's old is roaring back in fine new form. Our Product of the Year isn't one single device, but the *netbook*. Netbooks are, at the core, an inexpensive remix of the MobilePro's winning formula. The recipe varies, but the essential ingredients are a serving-size keyboard and screen, a sprinkling of connectivity, and a scoop of storage—often, rapid, durable solid-state. Our Technology of the Year, too, is trusted tech made better: Draft 802.11n networking is familiar Wi-Fi snazzed up and jazzed up for better throughput and range.

And those are just two of our winners. With 98 more, you'll find plenty of 2008 tech that can upgrade an e-companion you can't

work—or play—without. From a revolutionary touch-

screen all-in-one PC to free software that broadcasts your media around the world, our year's best picks in PCs, components, peripherals, software, and online services are a stunning mix of new—and old made new.

When my much-battered MobilePro broke down, I broke out the screwdrivers. In an afternoon, I grafted the screen from my old machine onto the body of another one with a cracked screen—bingo, four more years of solid-state goodness. Likewise, if your laptop needs a transplant—in this case, an infusion of storage—turn to “Replace Your Laptop's Hard Drive” (p. 92). John R. Delaney simplifies the surgery to five easy steps to save you a costly service call. Plus, we've got plenty of other how-to's—including a laptop-screen swap-out—archived at computershopper.com/howto.

Maybe your own laptop just needs an accessory or two to keep you computing efficiently on the road. If you're a frequent traveler, check out the mix of essential travel tech in “Road-Ready Gear” (p. 84): portable power adapters, security devices, and more. And if you're simply looking for a king-size upgrade to your portable rig—because you're ready for some serious 3D gaming—turn to “Get Your Game On, On the Go” (p. 76). We bench-tested five new gaming laptops, from the low \$1,000s to almost \$6,000, to see if that huge price span reflects big swings in performance.

My 1998 MobilePro went the way of all tech, but it edited gracefully. That's because I'm writing this letter on my new *inamora*—an Asus Eee PC 1000. For our review, turn to p. 20. Do you have a piece of old-school tech you can't live without—and wish electronics makers would “re-mix”? Share your thoughts: john.burek@computershopper.com.

We want to hear from you!

What do you think of this issue? Let us know: feedback@computershopper.com

COMPUTER SHOPPER

EDITOR-IN-CHIEF John A. Burek

DESIGN DIRECTOR Chris Phillips

MANAGING EDITOR Jonathan Rougeot

SENIOR EDITORS Sarah Anderson, Matthew Murray

ASSOCIATE EDITOR Les L. Shu

ASSISTANT EDITOR Matt Safford

EDITORIAL ASSISTANT Serguei Servanov

VIDEO INTERN Samuel Lee

COPY CHIEF E.E. Bradman

COPY EDITORS Jasmin Malik Chua, Lizelle A. Vilar

CONTRIBUTING EDITORS

Barry Brenesal, Rick Brodie,

James Boales, John R. Delaney,

David English, Susan Glaser,

Josh Norem, Bill O'Brien, Asa Somers

PUBLISHER Colleen Daly

ADVERTISING SALES

ADVERTISING DIRECTOR Steven Goodman

EAST

AL, AR, CT, DC, DE, FL, GA, IL, IN, IA, LA, MA, MI, ME, MN, MO, MS, NC, NH, NJ, NY, OH, PA, RI, SC, TN, TX, VA, VT, WA, WI, WV, Canada (East of Montreal)

ADVERTISING DIRECTOR Steven Goodman (917) 326-8705

REGIONAL SALES MANAGER Nancy Rosscoe (917) 326-8720

ACCOUNT EXECUTIVE Diana Langerbach (917) 326-8718

WEST

AZ, CA, CO, HI, ID, KS, MT, ND, NE, NV, NM, OK,

OR, SD, UT, WA, WY, Canada (West of Ontario)

ACCOUNT EXECUTIVE Diana Langerbach (917) 326-8718

ACCOUNT COORDINATOR Sharon Gato (917) 326-8722

AD TRAFFIC Tracey Mazzocco

GENERAL MANAGER, ONLINE VP, MARKETING Josh London

MARKETING

MARKETING MANAGER Karol Steinschaber

TECHNICAL PRODUCER Richard Grech

CIRCULATION DIRECTOR Shawne Burke Pecar

DIRECTOR, SINGLE-COPY SALES Mark Peterson

CONTROLLER Tamika Williams

PRODUCTION

PRODUCTION MANAGER Randall McCall

ELECTRONIC PREPRESS SPECIALIST Deborah Jarski

STAFF ACCOUNTANT Teresa Owens

OFFICE ADMINISTRATOR Adriana Melendez

SX2 MEDIA LABS

PRESIDENT AND CEO David Sills

CHIEF STRATEGY OFFICER Elizabeth Roberts

CHAIRMAN Barry Schwimmer



Computer Shopper, 72 Madison Ave., 10th Fl., New York, NY 10016
Sales: (800) 999-7467; Editorial: (917) 326-8700; Fax: (212) 481-0920
Customer Service: 877-214-7590; Subscription Inquiries: 800-274-6384

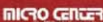
For subscription service questions, address changes, or to order: Please contact us at www.computershopper.com/service (customer service) or subscriptions@computershopper.com (to order). Phone: US and Canada (800) 274-6384; elsewhere (800) 999-7467; Fax: (212) 481-0920; Email: subscriptions@computershopper.com. Please include your full name and the address at which you subscribe; do not send attachments; subscriptions@computershopper.com is not a valid email address. The one-year (12-issue) rate is \$24.95. Outside the US add \$50 per year for surface mail. US funds only. Please allow 4-6 weeks to receive your first issue as well as for any changes to take place on an existing subscription. **Back issues:** \$8 each in the US, \$12 each elsewhere (subject to availability). Prepayment is required. Make checks payable to Computer Shopper. Mail requests to Back Issues, Computer Shopper, P.O. Box 52965, Boulder, CO 80522-2565. **Mailing list:** We sometimes make our customer lists available to third parties that may interest you. If you do not wish to receive their mailings, please write us at: Computer Shopper, P.O. Box 52965, Boulder, CO 80522-2565.

GET YOUR LIFE
TO→GO



LinkStation Mini™ Compact Shared Network Storage

With its ultra **compact**, ultra **silent** and ultra **reliable** design, Buffalo's LinkStation Mini could become as vital as your daily cup of joe. Available in **500 GB** and **1.0 TB** Capacities.



BUFFALO™

www.buffalotech.com

Buffalo Technology (USA), Inc. Buffalo Technology, Buffalo logo and LinkStation are either trademarks or registered trademarks of Buffalo Technology (USA), Inc. The names and logos of other companies mentioned herein belong to their respective owners.

Bring your website to life with 1&1!

1&1 Website Builder

Create an eye-catching
website in minutes!
No HTML knowledge
needed!



1 Choose your layout



World's #1 Web Host

With a wide variety of products and hosting packages, superior data center technology, unparalleled reliability, special offers, great prices and a 90-Day Money Back Guarantee, it's no wonder 1&1 is the world's biggest and fastest growing web host!



Overnight Prints

For a limited time, get 100
FREE personalized business
cards with your 1&1 Home or
Beginner Package.*

**Promote
your website!**

Use your **FREE** business
cards to share your
website address.

**Limited Time
Offer!**

	1&1	Go Daddy	Verio
	BEGINNER	ECONOMY PLAN	HOSTING 1000
Best Value: Compare for yourself.			
Included Domain Names (.com, .net, .org, .info or .biz)	1 Domain FREE	\$ 1.99/year	1 Domain Free
Web Space	10 GB	10 GB	5 GB
Monthly Transfer Volume	300 GB	300 GB	200 GB
E-mail Accounts	600	100	100
Mailbox Size	2,000 MB	100 MB	5,000 MB
Website Builder	8 Pages	\$ 4.99/month for 5 Pages	9 Pages
Photo Gallery	✓	✓	✓
Blogging	✓	✓	✓
90-Day Money Back Guarantee	✓	—	30-Day Risk Free Trial
Support	24/7 Toll-free Phone, E-mail	24/7 Phone, E-mail	24/7 Phone, E-mail
Price Per Month	\$3⁹⁹	\$4²⁹	\$11⁹⁵

© 2008 1&1 Internet, Inc. All rights reserved.

Visit 1and1.com for details. Prices based on comparable Linux web hosting package prices, effective 8/26/2008.

* Offer valid for new customers only and applies exclusively to 1&1 Home and Beginner Packages. Limit 1 voucher per customer.

For full promotional offer details, visit www.1and1.com. Product and program specifications, availability, and pricing subject to change without notice.

2 Arrange your pages

My WebsiteBuilder Website



3 Add text and pictures



4 Publish your website



Call **1.877.go1and1**
Visit us now **1and1.com**

1&1

ALTERNATIVE THINKING ABOUT SYSTEM POTENTIAL:

See eye to eye with your budget — without limiting your vision.

Compromising is fine. For other people. But now you can watch your bottom line, while still getting a look into the future. The HP portfolio of solutions erases the gap between cost and innovation, while delivering reliable ProLiant technology, all at prices that require a second look. So, while others try to think outside the box — we're rethinking what goes on inside it.

Technology for better business outcomes.



HP StorageWorks DAT160 USB Tape Drive

\$729 (Save \$80)

Lease for just \$18/mo.

SmartBuy [PN: Q1580SB]

- One-Button Disaster Recovery feature easily restores lost files, applications
- Store up to 160GB on a single cartridge, while backing up to 50GB/hr.



HP ProLiant DL120 G5 Server

\$849 (Save \$339)

Lease for just \$21/mo.

SmartBuy [PN: 470064-763]

- Powered by the Intel® Core™ 2 Duo Processor
- One 250GB SATA hard drive
- 2GB memory
- 1-year limited warranty



HP BladeSystem c3000 Enclosure

\$3,959 (Save \$1,863)

Lease for just \$110/mo.

SmartBuy [PN: 481658-001]

- Supports up to 8 server blade devices in a 6U enclosure
- 3-year limited warranty

HP ProLiant BL260c Server

\$899 (Save \$631)

Lease for just \$22/mo.

SmartBuy [PN: 480965-B21]

- Powered by the Intel® Xeon® Processor
- 2GB memory
- 1-year limited warranty



See additional HP models which feature small form factor, high-performance SAS hard drives.

To learn more, call 1-866-625-0806 or visit hp.com/servers/rethink4



Prices shown are HP Direct prices; reseller and retail prices may vary. Prices shown are subject to change and do not include applicable state and local taxes or shipping to recipient's address. Offers cannot be combined with any other offer or discount and are good while supplies last. All featured offers available in U.S. only. Savings based on HP published list price of configured or equivalent (list price: \$5,822 — \$1,863 instant savings = SmartBuy price of \$3,959; Blade Server: \$1,530 — \$631 instant savings = SmartBuy price of \$899; Rack Server: \$1,188 — \$339 instant savings = SmartBuy price of \$849; Tape Drive: \$809 — \$80 instant savings = SmartBuy price of \$729). Intel, the Intel logo, Xeon and Xeon Inside are trademarks of Intel Corporation in the U.S. and other countries.

© 2008 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice.

TRENDS

UPCOMING TECHNOLOGIES AND PRODUCTS

Widget Channel Aims to Further Bridge Gap Between TV, Web

A NEW SERVICE will allow viewers to bring some of the conveniences of the Web to their televisions.

The Widget Channel, a joint venture between Intel and Yahoo, aims to further close the gap between the Web and television by offering Internet services such as listings, weather, financial news, and Twitter updates on your TV set.

Yahoo is basing the new service on its Widget Engine, capitalizing on the popularity of the widget, a small app found on Web pages, computer desktops, and mobile devices.

Intel is developing the hardware for a series of set-top boxes and digital televisions that will support the Widget Channel. Its Intel Media Processor CE 3100 will

be the first chip developed solely for Internet-connected consumer electronics devices. The chip combines features that offer high-definition video support, home-theater-quality sound, and advanced 3D graphics. It pairs an Intel



processor core with multi-stream video decoding/processing and hardware to help translate Web content to the television.

The CE 3100 chip will be available for use in optical media players, connected consumer electronics devices, advanced set-top boxes, and

digital televisions.

The Widget Channel service will allow viewers to use a remote control to navigate through the widgets. Viewers can watch videos, track stocks, follow sports teams, communicate with friends, and view news updates.

Yahoo also has software that allows developers to create widgets. Blockbuster, CBS, Disney-ABC, MTV, Showtime, eBay, Joost, Twitter, Samsung Electronics, and Toshiba have all expressed interest in developing TV widgets. And Comcast, the largest cable TV provider in the United States, is working with Intel to offer the technology in its set-top boxes. —Jonathan Rougeot

STATS

Electronics in Our Homes

21

Average number of consumer electronics devices in the American household

76

Percentage of U.S. households that own a digital camera

19

Percentage of U.S. households that own a GPS unit

85

Percentage of U.S. households with DVD players

Source: NPD Group's Household Penetration Study: Ownership Landscape 2008

Google Takes On Microsoft (Again) With New Browser

BESIDES WEB ADVERTISING, Microsoft might have a new reason to fear Google. The Internet search giant recently unveiled its own Web browser, Chrome.

Chrome is completely open source, running on a newly developed JavaScript engine called V8 and using technologies from both Apple and Mozilla. It is designed to take better advantage of the kinds of Web applications that are common today but didn't exist when the first graphical browsers were developed in the early 1990s. A clean, simple interface is central—to help discourage feature bloat—and multiple tabs open in multiple processes for improved perfor-

mance and error recovery.

Our initial experience with Chrome was positive. It renders pages noticeably faster than Firefox 3 and especially Internet Explorer 7. It's stable, and we



love the start page, which displays thumbnails of your recently visited sites that also act as links. The location bar is more intuitive than IE7's and in many ways is almost identical to Firefox 3's Awesome Bar. It also has the best features for importing information from other browsers.

Google still needs to work out some kinks, however—not all pages render correctly, and not all controls behave the way they should. But the company has delivered a very strong product. At press time, the beta was available for Windows only, but the company promises that Mac and Linux versions are in the works. —Matthew Murray

Zoho Unites Three Programs for Online File-Management System

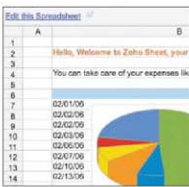
A NEW FREE ONLINE file-management system from Zoho unites its documents, spreadsheets, and presentation applications in one place—and is poised to be a competitor to Google Docs.

Zoho Docs brings together Zoho Writer, a word processor; Zoho Sheet, a spreadsheet application; and Zoho Show, an online presentation program, in one program. It serves as a file repository for all three apps, eliminating the need to search multiple platforms for a document.

Zoho Docs uses a split-pane interface, with document folders in a pane down the left and a desktop to the right. Users can create, edit,

share, view, and collaborate on files by navigating through the folders. Zoho Docs also includes Zoho Chat, which lets users communicate with their contacts.

The program uses hier-



archical folders, as well as drag-and-drop folder management. You can preview an item by clicking on the filename in a list, and then

clicking it again to edit it in a separate tab.

Zoho Docs is similar to Google Docs in that it allows users to create documents and share them with friends or groups via e-mail. Zoho one-ups Google, however, by letting the user upload almost any file, as long as it's 10MB or smaller (essentially doing double duty as free online storage). The program supports multiple file formats, including PDF and ZIP.

Earlier this year, Zoho created a service that lets users log in using existing Google and Yahoo accounts and import contacts from those services.

—Jonathan Rougeot

Intel Releases Eco Server Processors

Intel recently added four new multicore Xeon chips—including one that consumes as little as 50 watts of power, or 12.5 watts per core—to its list of high-performance, energy-efficient processors.

The CPUs, based on Intel's 45-nanometer manufacturing process, are the first Xeon processors to use transistors with gate insulators based on the chemical element hafnium. (The company also announced that already-existing chips in the Xeon 5200 and 5400 series will switch over to this new process.)

Intel says the new processors are drop-in-compatible with Intel dual-processor platforms released since 2006. The 5400-series chips will feature three quad-core models, with clock speeds of up to 3.4GHz; a dual-core version will have clock rates of up to 3.5GHz and use 80 watts of power. The L5430 is the most efficient chip, at 50 watts; the highest-performance model, the X5492, uses 150 watts.

The new processors range in price from \$562 to \$1,172 each. —Les L. Shu

New Report Shows Blu-ray Sales on the Rise

THE UNITED STATES is making a smooth transition to Blu-ray, according to a recent report by Futuresource, a U.K.-based consulting firm.

Despite initial reports by the NPD Group indicating slower-than-expected growth, high-definition Blu-ray Disc sales have hit about 6 percent of the total home video market, a boost that most likely came from HD DVD exiting the market. Futuresource expects that blockbuster films being released at the end of the year could see Blu-ray sales reach 10 percent to 12 percent. (Europe has been slower to pick up on Blu-ray. There, the format makes up only about

2 percent of the market.)

Most Blu-ray purchases are new releases; back-catalog titles have not seen similarly strong sales. Warner Bros. has responded by lowering the prices of its catalog Blu-ray movies, but the effect of the price drop is not yet clear. This



quarter, manufacturers will begin shipping more players with BD Live software, potentially spurring growth; these devices allow for more interactive features in movies and games through a link to the Internet.

Futuresource predicts that, based on current sales trends, consumers will purchase 45

million Blu-ray Discs by the end of the year, a 400 percent increase over last year. The firm predicts that by 2012, Blu-ray will own up to 50 percent of the market, especially as playback hardware becomes cheaper and more popular.

Blu-ray prevailed in the war for high-definition-disc supremacy over HD DVD earlier this year. Blu-ray got a huge boost in 2006 with the release of Sony's PlayStation 3, which can play Blu-ray Discs. By the end of 2007, Blu-ray was outselling HD DVD 2-to-1. In January, Warner Bros. announced it would no longer produce HD DVDs, and the following month, Toshiba announced it was pulling support for the format, effectively chiming its death knell. —J.R.

30 million computer users don't trust the power grid.



APC Back-UPS ES 750G with SmartShutting™ Technology automatically powers down idle peripherals to save energy and money.



They do trust APC. Shouldn't you?

Think of all that you rely on your computer for: personal and business files, financial information, broadband access, videos, photos, music, and more. Increasingly, computers are the hub for managing our lives. And more people rely on APC to protect their hardware and data than any other uninterruptible power supply (UPS) brand.

Why is APC the world's best-selling power protection? For 20 years, we have pioneered power protection technology. Our Legendary Reliability™ enables you to save your data, protect your hardware, and prevent downtime. It also guards against a power grid that is growing less reliable every day.

According to the Department of Energy, electricity consumption will increase by 40% over the next 10 years. Yet today, investment in utilities is at an all-time low. It's a "perfect storm" for computer users, one that makes APC protection even more essential.

APC power protection products are available at:



"The pricetag on the new UPS is \$99.99. While I'm not in the habit of endorsing products in this blog, if you're in the market for a workstation-class UPS, why not opt for the greener option?"

- Heather Clancy,
ZDNet.com

APC has a complete line of power protection solutions to suit a range of applications. Already an APC user? Get the latest replacement battery cartridge for your unit or upgrade to a newer model. For more information on this or our other great products, or for information about environmentally responsible disposal of your old battery, visit www.apc.com

Find out why 30 million people don't need to worry about losing their data to power problems



Energy efficient solutions for every level of protection:

Surge Protection

Starting at \$34
Guaranteed protection from surges, spikes, and lightning.

7 outlets, Phone/Fax/Modem Protection, Master/Controlled Outlets

Save \$25 per year on your electric bill!



Battery Back-UPS™

Starting at \$99
Our most energy efficient backup for home computers.

10 outlets, DSL and Coax protection, Master/Controlled Outlets, High Frequency Design, 70 minutes of runtime*

Save \$40 per year on your electric bill!



APC can help with your power protection needs. Visit apc.com to see our complete line of innovative products.



Enter to Win a Back-UPS® ES 750G! (a \$99 value)

Also, enter keyword to view other special offers and discounts.

Visit www.apc.com/prmo Key Code #685W or Call 888.288.APC or 8031 or Fax 401.788.2797

APC
Legendary Reliability™

©2008 American Power Conversion Corporation. All trademarks are owned by Schneider Electric Industries S.A.S., American Power Conversion Corporation or their affiliated companies.
e-mail: usapower@apc.com * 132 Fairgrounds Road, West Kingston, RI 02892 USA • 888-697-1717 * Runtimes may vary depending on load.
*Average savings are based on comparable competitive models, and are comprised of two energy saving features: an ultra efficient electrical design, and the master/controlled outlets feature.

NEW PRODUCTS PCs

BY SERGUEI SERVIANOV AND MATTHEW MURRAY



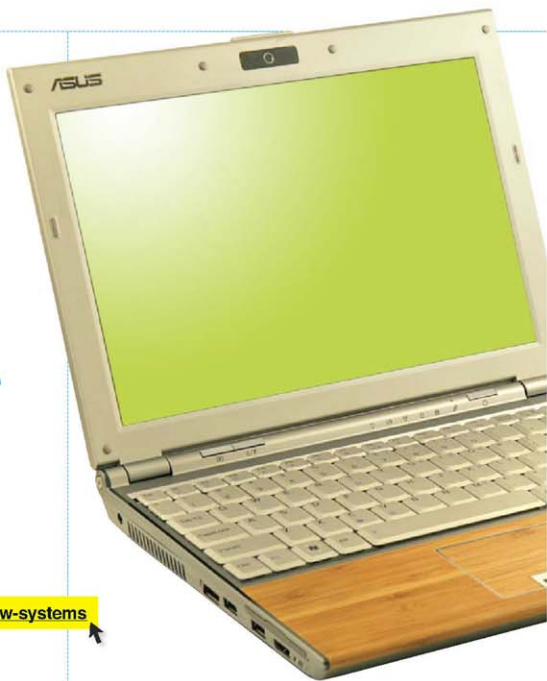
1080p tendencies

All-in-ones that combine the crystal clarity of Blu-ray movies and a screen large enough to view them in all their glory have been rare—until now. The **Sony VAIO LV High-Definition PC/TV** has the Blu-ray drive you want and the 24-inch monitor you need to view flicks at full 1080p resolution. The LV can also hold up to one terabyte of hard drive space, so you'll have plenty of space to record all your favorite HD TV shows. The LV starts at about \$1,600. Sony Electronics, www.sony.com/vaio



Honor bound

High-powered gaming PCs don't always have to be stratospherically priced. iBuypower's **Gamer Paladin 998**, for example, costs \$1,999—relatively low for a gaming desktop—but is loaded with valuable components such as an Intel Core 2 Quad Q9550 CPU, 4GB of RAM, a 500GB hard drive, and ATI's blazing Radeon HD 4870X2 graphics card. All this comes packed in a Cooler Master case, which should keep your hardware cool even when your gaming heats up. iBuypower, www.ibuypower.com



C For more: computershopper.com/new-systems



Lucky number 9

If you don't need a bulky laptop—and you don't want to pay a bulky price—for surfing the Web, checking e-mail, or chatting over instant messages, a netbook is the way to go. Now, Dell has entered the market with its **Inspiron 9 Mini**, which lives up to its name. It's small enough to slip into a purse or backpack, weighs just over 2 pounds, and has an 8.9-inch display that's just right for a single-serving session in bed or at the coffee shop. You can get it in black or white, and with either Windows XP Home Edition (for \$399) or Ubuntu Linux (for \$349). *Dell, www.dell.com*

Air today, gone tomorrow

It takes a lot of courage to enter the realm of upscale, ultrathin notebooks, but Samsung is taking the risk with its new **X360**. Weighing in at 2.8 pounds and measuring only 1.2 inches at its thickest point, the \$2,200 X360 is physically unassuming. But don't expect the same of its performance: It's outfitted with Intel processors, a 13.3-inch display, HDMI, Wi-Fi, and Bluetooth, as well as your choice of a 120GB hard drive or a 64GB or 128GB solid-state drive. *Samsung, www.samsung.com*



Ready, aim, shoot

Asus's **Bamboo** series of bamboo-encased laptops turned heads when the company showed off concept models earlier this year. Now, Asus aims to help you do the same by making the units commercially available. Models come with either 11.1- or 12.1-inch screens and plenty of options for Core 2 Duo processors and DDR2 RAM, so your machine's internals will say as much about what you do as its case will your sense of style. Pricing was not available at press time. *Asustek Computer, usa.asus.com*



Good thing, small package

Shuttle's desktops don't hog much space even at full size, but if you really need to maximize every inch, consider the company's new **X27**. Measuring a mere 2.75x7.3x9.8 inches (HWD), it's small enough to fit under a sheet of paper. Because it's based on Intel's Atom processor, it's also highly energy-efficient. With plenty of ports and two expansion bays, you can count on it seeing you through whatever basic tasks need completing. Pricing was not available at press time. *Shuttle Computers, us.shuttle.com*



NEW PRODUCTS GEAR

BY LES L. SHU

Pig sounds

It's easy to dismiss the **iPig** (\$139.99) as another weird iPod dock/speaker system, but this unit packs four speakers, a sub-woofer, and 25 watts of sound for your iPod. (An additional auxiliary jack lets you connect it to other audio sources.) To adjust the volume, simply touch the left or right ears. Also, did we mention that it's in the shape of a pig? *Speakai, www.speakai.com*



 For more: computershopper.com/new-gear



Electronic green thumb

If you've ever wondered why you kill more plants than you grow, the innovative PlantSense **EasyBloom Plant Sensor** (\$59.95) may prove it wasn't entirely your fault. Place the USB-based device into the soil around your plant, and it'll monitor the plant and its environment.

The sensor analyzes your soil and tells you what types of plants will grow there, and it can even help you figure out why a particular plant isn't thriving. (It can also tell you if a plant needs more or less water.) A day later, plug the sensor into your computer and upload its info to PlantSense's Web site for a diagnosis and a list of recommendations. PlantSense, www.plantsense.com



Endless movie library

The **BD300 Blu-ray player** from LG ensures that you will never run out of movies to watch. Besides playing your DVD and Blu-ray discs, the BD300 can stream movies and TV shows from Netflix—simply call up a dedicated Netflix menu to browse and choose what you want to watch. The BD300 also boasts fast loading times as well as support for Dolby True HD and BD Live interactive content. LG, www.igus.com



Super shooter

The **Nikon Coolpix P6000** (\$499.95) camera has the features and performance to satisfy those who want the power of a digital single-lens reflex (DSLR), yet it retains some of the qualities—including a large LCD and optical image stabilization—of a compact camera. The P6000 has a 13.5-megapixel sensor and a 4x optical zoom lens with an optional wide-angle adapter. You can upload photos directly from the camera to the Web using its built-in Ethernet port, and you can even geo-tag your photos using the GPS function.

Nikon U.S.A., www.nikonusa.com



Mouse catcher

With Logitech's **V550 Nano Cordless Mouse** for Notebooks (\$59.99), you'll never again have to wonder where your mouse is. That's because the mouse physically attaches to a removable adhesive dock on the lid of your laptop, which Logitech refers to as the Clip-and-Go. The mouse features 18-month battery life on two AA batteries, and hyper-fast scrolling lets you scan through documents quickly. Logitech, www.logitech.com

Media extension

Kodak enters the home theatre arena with its **Theatre HD Player** (\$299), a set-top box that lets you access media files from your PCs, network-attached-storage drives, and flash drives and cards—as well as the Internet—for playback on an HDTV. The media extender uses your home's established Wi-Fi or Ethernet network, and it supports the Draft 802.11n wireless protocol. It also supports movies up to 720p resolution, as well as photos, music, and podcasts. It has a simple-to-use interface, and you navigate through menus using a cordless mouse. From the Web, you can call up services like Kodak Gallery, Flickr, YouTube, and RadioTime.

Kodak, www.kodak.com



REVIEWS

THE LATEST HARDWARE AND SOFTWARE PRODUCTS

Asus Eee PC 1000H

King-size netbook is a comfortable winner



ASUS LAUNCHED the "netbook" category with its popular Eee PC 4G, which was quickly eclipsed by offerings from competitors such as Acer, HP, and MSI. Now, Asus has fired back with the Eee PC 1000H, a bigger, more powerful unit that adds a touch-typable keyboard, a nicer screen, a larger hard drive, and better performance to the successful Eee formula.

The machine is definitely the heavyweight of the netbook category, measuring 1.5 inches high at its thickest point, 10.5 inches wide, and 7.5 inches deep, and weighing 3.2 pounds (with a six-cell battery). That said, it's still closer in size and heft to other netbooks than to full-featured ultraportables, and it's more portable than standard-size notebooks.

The extra size buys you some real advantages, such as a bright 10-inch 1,024x600-pixel LED-backlit screen; a keyboard large enough for touch typists with odd fingers, though the odd placement of the up-arrow key between the right Shift key and the forward slash takes some getting used to; and a fine multitouch touch pad, which is unfortunately armed with ridiculously stiff buttons.

The Eee PC 1000H uses Intel's Atom N270 low-power mobile processor, and it has 1GB of RAM—sufficient for running the

OS, Windows XP Home Edition, and most light tasks (you can expand it to as much as 2GB). The audio is the best we've heard from a netbook, making this a viable entertainment center when you're on the road. The Eee PC 1000H we tested features a generous 80GB hard drive, which can be expanded using the SDHC memory-card slot and three USB ports, though there's no ExpressCard or PC Card slot. Expansion is rounded out by a 10/100 Ethernet port, VGA out, and headphone and microphone jacks.

Other handy features include a utility to enable or disable 802.11n Wi-Fi and Bluetooth or the 1.3-megapixel Webcam; several power-saving modes that allow you to balance

performance and battery usage to your liking; and three screen-resolution modes (including the unusual 1,024x600 and 1,024x768

"LCD Compress") to make the most of the smallish display.

The lack of an optical drive prevented us from running our usual DVD rundown test, but the Eee lasted 5 hours and 48 minutes doing a variety of tasks with Wi-Fi disabled. In more typical usage with Wi-Fi enabled, we averaged about 4 hours and 45 minutes per charge. —Denny Atkins



EDITORS' RATING **9.0**

PROS Comfortable keyboard; good battery life; excellent audio; multitouch touch pad; easy access to power-saving options

CONS Arrow key awkwardly placed; stiff touch-pad buttons; no PC Card, ExpressCard slot

SPECS 1.6GHz Atom N270; 1GB DDR2; 80GB hard drive; no optical drive; 10-inch LED; integrated graphics; Windows XP Home Edition

Asustek Computer, 888-678-3688
usa.asus.com

Direct Price \$549

What's the Deal?

Asus zooms back into the netbook market with the Eee PC 1000H, a slightly larger and more powerful version of the model that created the new category of laptop earlier this year.

What it's for: Very basic notebook functions, such as typing documents and surfing the Web, that don't require huge amounts of processing power.

Who it's for: People looking for a supplementary system or one for their children, or those who know they won't need to run complex applications that require intensive computing resources.

What's included: Intel Atom processor; 1GB of RAM; and an 80GB hard drive, on which Windows XP Home Edition comes preinstalled. (Another version offers Linux as an alternate OS.)

The bottom line: If you've been looking to enter the netbook fray but have been afraid to give up the benefits offered by larger laptops, the Eee PC 1000H could be the no-compromises compromise you've been waiting for.

G For more: computershipper.com/laptops

Olympus E-3

The best Four Thirds camera faces tough rivals

EDITORS' RATING 8.0

0 BETTER >> 10

PROS Exceptional build quality; excellent color rendition; best Four Thirds camera available

CONS Complicated interface; small sensor

Olympus America, 888-553-4448
www.olympusamerica.com

Mfr. Est. Price \$1,699 (body only)

THE OLYMPUS E-3 is a very good camera, but tough competition makes it difficult to recommend it unequivocally.

The E-3 represents the top of the line in the Four Thirds System, which was created by Olympus and Kodak for digital single-lens-reflex (DSLR) cameras. Four Thirds sensors are approximately 60 percent to 70 percent the size of the Advanced Photo System type-C (APS-C) sensors used in many DSLRs. The advantage of the Four Thirds System is that it allows higher off-center resolution, i.e., better sharpness at the edges of an image; it also allows for smaller lenses and camera

bodies. APS-C sensors, on the other hand, are generally less susceptible to image noise

The tank-like Olympus E-3 is the best Four Thirds camera available.



because of their size.

The E-3 is a feature-rich camera. It packs in a 10.1-megapixel sensor, a 5-frame-per-second continuous shutter speed, sensor-based image stabilization, an 11-point autofocus system, a built-in flash (rare on professional cameras), and a bright viewfinder with 100 percent coverage—what you see is what you get. And the E-3, with its weather-sealed body, is built like a tank. It's constructed of magnesium alloy and feels as solid as a rock in the hand. If tactile sensation is important, rest assured that the E-3 feels as well-built as cameras that cost twice as much.

Unfortunately, the E-3's ergonomics leave quite a lot to be desired. It has a dizzying range of buttons and switches, and the menu system is dated-looking and confusing to navigate.

The E-3 is capable of excellent images. Color rendition is particularly good, sitting somewhere between naturally saturated and vivid colors. The E-3 is virtually noise-free up to ISO 800, at which point noise starts to creep in. This is likely the result of the smaller sensor struggling under the pressure of low-light situations. The E-3's images appear slightly soft, but this isn't noticeable except when images are greatly enlarged.

All these make the E-3 a complicated camera to recommend. On the plus side, it's a very well-built DSLR that would be a worthwhile upgrade for owners of existing Four Thirds equipment. But the E-3 is priced comparably with the Nikon D300 and the Canon EOS 40D, and given the high standard set by these cameras, it's trickier to recommend. —John B. Stafford



in this section

22 DESKTOPS

Acer Aspire X1200
HP Compaq dc5850
iBuypower Gamer Fire 294
Shuttle KPC K4800



26 LAPTOPS

HP Compaq G730b
Lenovo ThinkPad SL 400
Acer Aspire One
Fujitsu LifeBook A6210
HP Pavilion dv5t



32 COMPONENTS

Raidmax IceCube
Chieftec CH-05
Asus EAH4870X2
Gigabyte MA790GP-DS4H



34 NETWORKING

Netgear Wireless N
Upgrade Kit (WNEB3100)



35 PERIPHERALS

Buffalo MiniStation DataVault
Maxtor Black Armor



36 DISPLAYS

Samsung SyncMaster 305T
ViewSonic VX1962wm



40 PRINTERS/SCANNERS

Brother Mf4C-6490CW
HP Photosmart A636
Compact Photo Printer



43 CAMERAS

Casio Exilim EX-Z200
Nikon Coolpix S210



44 CONSUMER TECH

Audio-Technica QuietPoint
ATH-ANC3
Eymotic H12 Headset + Earphones



46 GAMING

GoLive2 Stix 200
LeapFrog Leapster2



50 SOFTWARE

Sony Vegas Movie Studio 9.0
Platinum Edition
Corel VideoStudio Pro X2
System Mechanic 8



THIS MONTH'S TOP PRODUCTS

55 Gaming Desktops
56 Performance Graphics Cards
58 DVD- and Video-Editing Programs



Get More Online

Click to
computershopper.com
for the latest in-depth reviews,
videos, and product news.



For more: computershopper.com/digital-cameras-camcorders

HP Compaq dc5850

Solid business machine has strong support plan

THE COMPAQ DC5850, HP's latest foray into business-oriented minimalism, should give you a leg up on your work without tearing a hole in your bottom line.

Our \$1,063 test unit came sans monitor but was outfitted with a 2.66GHz Athlon 5000B processor, 2GB of RAM, an 80GB Western Digital hard drive, a DVD burner, and integrated Intel GMA 3100 graphics, the last of which suggests its complete lack of gaming aptitude. In other words, this desktop is a recipe for graphics frustration in a black-and-silver box.

Although our 3D tests proved you shouldn't use this system for gameplay, it's competent enough for everyday work, despite its lack of office software. There's also room inside for a second 5.25-inch optical drive and another 3.5-inch hard drive, as well as a PCI Express slot, should you want to upgrade to a better graphics solution.

Up front is a pair of USB ports, along with headphone and microphone jacks. Out back are six

additional USB ports, a LAN port, a VGA port, two PS/2 ports, a serial port, and a DVI-D port for an optional display. The system runs Windows XP Professional—not Vista—and is rated at a maximum resolution of 1,600x1,200, ideal for spreading multiple windows across a big monitor, though we had trouble viewing resolutions above 1,280x800 on our 30-inch Dell 3007WFP-HC monitor.

Our main complaint is that you can find less-expensive PCs loaded with comparably powerful components at many big-box stores. But HP's advantage is its three-year onsite warranty, which is very generous compared with the two-year coverage many competitive systems offer. —Bill O'Brien



PROS Small form factor; expandable inside and out

CONS Somewhat expensive; limited 3D gaming capabilities; may not work properly with larger monitors

SPECS 2.66GHz Athlon 5000B; 2GB DDR2; 80GB hard drive; DVD±RW; no monitor; integrated graphics; Windows XP Professional

Hewlett-Packard, 877-203-6108
www.hp.com

Direct Price \$1,063

For more: computershopper.com/desktops

Acer Aspire X1200

Energy-efficient, compact PC is no media-center master

DESPITE ITS DIMINUTIVE DIMENSIONS (10.6x4x14.4 inches, HWD), Acer's \$449.99 Aspire X1200 is conventional in looks and behavior. Its solid-black metal case, silver trim (most visible on the power button), and gloss-black front panel give this system the unapologetic appearance of a home media device with attitude.

The bevy of included features helps back up that attitude with some substance. On the front you'll find a DVD±RW drive, four USB ports, one four-pin FireWire port, headphone and microphone jacks, and a multifunction card reader. Around back, there are not only the expected Ethernet, keyboard, mouse, and USB jacks (four more, in fact), but also six-channel audio, external Serial ATA (for hooking up an external hard drive), and an HDMI port (for outputting video to an HDTV). A 320GB hard drive offers ample room for storage. Although the system's not silent, it's close.

If you want to do much more than basic photo, video, or music chores, however, keep your expectations in check. Though outfitted with 4GB of RAM and running the

64-bit version of Windows Vista Home Premium, the PC uses an energy-efficient 2GHz Athlon 64 X2 4850e processor that's not outstanding in the performance department: It took an unusually long 8 minutes and 27 seconds to finish our Windows Media Encoder test and a slightly above-average 4 minutes and 27 seconds to complete our iTunes conversion trial.

While the system isn't well-equipped for gaming, either, the laptop's most surprising omission is a TV tuner, which limits its utility when used alongside a typical entertainment setup. Don't count on adding one yourself; its one free expansion slot is half-height, and cracking open the case will void the one-year warranty. —Matthew Murray



PROS Tiny; energy-efficient; quiet; HDMI and eSATA ports provided

CONS Pedestrian performance; limited expandability potential

SPECS 2GHz Athlon 64 X2 4850e; 4GB DDR2; 320GB hard drive; DVD±RW (LabelFlash); no monitor; integrated graphics; Windows Vista Home Premium

Acer America, 800-733-2237
www.acer.com/us

Direct Price \$449.99

The Smart-UPS® closet solution: Managed, Secured, Cooled

Need to get out of the closet – but still keep an eye on your network? Bet you never thought you'd end up with so many closets to look after. And as they've grown in numbers, they've also grown in complexity, adding to the risk – and the high cost – of downtime.

The availability of those closets is critical, but whether your network is converged, in multiple locations, or housed out of sight and out of mind, you can't be in ten places at once, making sure they're all secure and running smoothly.

Fortunately, APC has engineered an integrated solution that starts with new Smart-UPS XL – the Smart-UPS you already know and trust, made even smarter with integrated management and security-enabled features. Your view into the network closet has never been clearer, with automatic alerts of power events, security threats, or thermal incidents that put your critical availability at risk.

If you're converging your network or just need an extra pair of eyes, start with APC Smart-UPS XL: the foundation for highly available, secure, cooled, managed networks.

UPS solutions start at \$1125

Now
with pre-installed
network management!
(Not included in all units)



APC's Smart-UPS and Symmetra
lines are certified Cisco Compatible,
integrating with Cisco CallManager
version 4.x and Cisco Unity Express
and providing graceful shutdown in
the event of an extended power outage.

Compatibility certifications with the industry's top
IP Telephony Vendors: Cisco, Avaya, and Nortel



Smart-UPS® XL
NEW! APC Smart-UPS XL Modular
3000VA 120V Rackmount/Tower

Find APC power protection products at: **CDW**



Register to **WIN** a Smart-UPS® XL 1400VA
Rackmount – a \$779 Value!

Visit www.apc.com/promo and enter key code d684w • Call 888-289-APCC x8030 • Fax 401-788-2797

©2008 American Power Conversion Corporation. All trademarks are owned by Schneider Electric Industries S.A.S., APC, or their affiliated companies.
e-mail: esupport@apc.com • 152 Fairgrounds Road, West Kingston, RI 02892 USA • AKGATEF_EN *Runtimes may vary depending on load.

Network management enabled UPS

Smart-UPS® XL starts at \$1125

Performance power protection with runtime
for servers, and voice and data networks.

- included PowerChute® management software
- intelligent battery management
- hot-swappable batteries, scalable runtime
- modular: tower or rack mount, hardware included



Management upgrades

PowerChute® Business Edition

Reliable network-based shutdown of multiple servers.
Included with Smart-UPS. Upgrades
available starting at \$279

- application shutdown support
- battery capacity indicator
- e-mail notification



InfraStruXure® Central

Provides an efficient way for organizations to manage
their company-wide physical infrastructure devices.

- real time device monitoring
- custom reporting capabilities
- advanced security
- instant event notification



Security

NetBotz® Security and Environmental starts at \$889
Protecting IT assets from physical and environmental threats.

- visual monitoring of all activities in
the data center or wiring closet
- third-party monitoring via dry-contacts,
SNMP, IPMI, 0-5V and 4-20mA
- user-configurable alarm and escalation policies
- temperature, humidity, and leak detection



Cooling

Wiring Closet Ventilation Unit

starts at \$869

(Up to 3kW of heat removal) Rapidly deployable wall or
ceiling-mounted heat removal system for wiring closets.



InfraStruXure® InRow SC starts at \$7200

(Up to 7kW) Rapidly deployable, in-row air
conditioning for server rooms and wiring closets.

- eliminates hot air mixing; maximizes cooling efficiency
- network manageable
- real-time capacity monitoring
- modular, scalable



APC
by Schneider Electric



Shuttle KPC K4800

Linux cube is a box of value

IF YOU SPEND MOST of your time reading and composing e-mails and Word documents or surfing the Web, chances are you'll wind up paying for horsepower you'll never tap into. Enter the Shuttle KPC K4800, a low-cost, Linux-based PC that comes with (almost) everything you'll need to start computing right out of the box.

For \$299.99, you get a 2GHz Intel Celeron 440 processor, 512MB of RAM, and Intel's integrated GMA 950 graphics—equipment more than capable of running the preinstalled, easy-to-use Foresight Linux OS (a Windows version of the KPC is also available). This desktop also comes with a CD-RW/DVD-

ROM combo drive, but you don't get a keyboard, mouse, or display—if you don't have these necessities, be prepared to spend another couple of hundred dollars.

The system has very limited expansion options other than adding more memory (up to 2GB using two slots) or a second hard drive; PCI slots are nonexistent. Onboard six-channel audio and Gigabit Ethernet are standard, and you can add wireless 802.11b/g networking for an

additional \$55. Connectivity comprises four USB ports, DVI and analog (VGA) video inputs, PS/2 keyboard and mouse ports, three audio jacks, and a 15-pin serial port.

From the very first time we turned the system on, we were impressed by how quiet this box runs; if not for the blue power LED, we wouldn't have known it was plugged in. We were also pleased with how quickly and effortlessly it acquired an IP address when we plugged in our Ethernet cable. Its performance in everyday tasks like burning CDs and loading Web pages was adequate if not exceptional, but if that's all you need, the K4800 is one of the best deals around. —John R. Delaney

iBuypower Gamer Fire 294

Impressive 3D gaming for a compressed price

BASED ON COMPONENTS that adhere to the AMD Game platform initiative, which helps consumers choose good gaming computers with a minimum of fuss, iBuypower's Gamer Fire 294 offers solid 3D performance for gamers on a budget. For \$1,299, you get quad-core processing, dual graphics cards, and lots of room for expansion.

The Gamer Fire 294 uses a black Thermaltake Armor MX midtower case; a huge 230mm fan mounted on the wind-side panel and two 120mm fans deal with intake and exhaust. While the system is idling, the three fans are a tad noisy, but when the CPU fan kicks in, the noise level is comparable to that of a small vacuum cleaner. Still, the tool-less chassis is well-stocked, with an 800-watt power supply, three free hard-drive and 5.25-inch drive bays, two available memory slots

and 32-bit PCI slots, and one PCI Express x1 slot. Thanks to the inclusion of a Sony Blu-ray reader, a double-layer DVD±RW drive, and a multifunction memory-card reader, support for virtually every removable-media format is covered. You don't get a monitor or speakers with this package, however.

With a quad-core AMD Phenom X4 9950 processor (2.6GHz), double ATI Radeon HD 4850 graphics cards, and AMD's 790X chipset under the hood, the Gamer Fire 294 is clearly up to snuff. The two graphics cards are set up in a CrossFireX configuration, and the MSI K9A2 motherboard has a whopping 4GB of DDR2 memory. The system turned in some high-end benchmark scores, particularly on our DirectX 10 gaming tests and our productivity trials, proving the system is as good for work as it is for play. —J.R.D.

EDITORS' RATING 7.8	
0 BETTER >> 10	
PROS	Solid performance; reasonably priced; includes Blu-ray drive
CONS	Loud fans; monitor, speakers not included
SPECS	2.6GHz Phenom X4 9950; 4GB DDR2; 500GB hard drive; Blu-ray reader; double-layer DVD±RW; no monitor; two ATI Radeon HD 4850 graphics cards (512MB, CrossFireX); Windows Vista Home Premium (64-bit)
iBuypower, 888-462-3899 www.ibuypower.com	
Direct Price \$1,299	

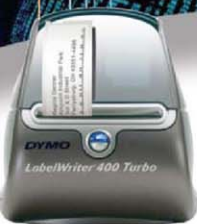


For more: computershopper.com/desktops

Want to Stay on the Cutting Edge?

PROVANTAGE has the latest products to keep you at the forefront of new technology.

Are you the type of person that always needs the latest and greatest in technology products? PROVANTAGE is the right place for you! With over \$1 Billion worth of inventory available for purchase, PROVANTAGE has been the best place to purchase cutting edge technology products since 1984. Visit us at www.provantage.com or call 800-336-1166 today!



Print Time Sensitive
Name Badges, Postage
Stamps, Labels and more!

Dymo LabelWriter 400 Turbo Printer

DYMO029\$109.15

DYMO



Revolutionary
removable hard disk
system for the desktop!



Iomega REV 120GB External Drive

IOMR007\$384.55

No cables. No clutter. Wirelessly
connect your USB devices to your PC.

D-Link Wireless USB Starter Kit

DLNW068\$160.95

D-Link

Access 13,000 internet radio
stations worldwide instantly!

Aluratek USB Internet Radio Jukebox

ALUTO2M\$34.29

Aluratek



Your digital life
at your fingertips

HP TouchSmart PC iQ506

HPP92RU\$1371.78



Get your Free
Buyer's Guide
Today!



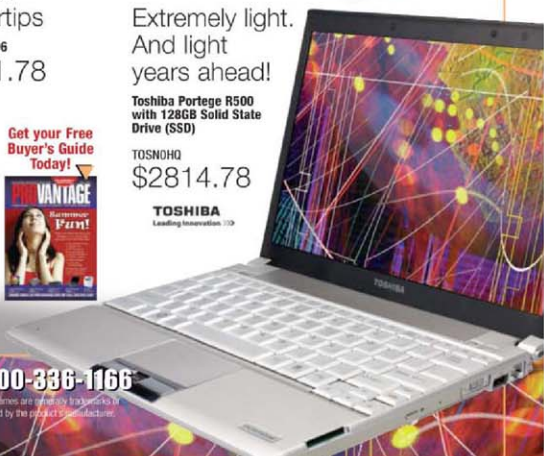
Extremely light.
And light
years ahead!

Toshiba Portege R500
with 128GB Solid State
Drive (SSD)

TOSNOHQ

\$2814.78

TOSHIBA
Leading Innovation™



PROVANTAGE®

VISIT US AT PROVANTAGE.COM * 800-336-1166

Products, prices, specifications or prices may change without notice. Company and/or product names are either trademarks or registered trademarks of their respective companies. Some conditions may be copyrighted by the product manufacturer.

HP Compaq 6730b

Costly biz machine brings the battery life

NO ONE WILL MISTAKE the \$1,387 HP Compaq 6730b for anything other than what it is—a button-down business notebook—but it runs circles around lower-end models. As suitable as it may be for suit-wearing travelers, however, the 6730b seems overpriced and underpowered—at least in the graphics department—compared with the similar Lenovo ThinkPad SL400 (see the review below).

EDITORS' RATING 7.2

0 BETTER >> 10

PROS Decent overall performer; excellent battery life; lets you access Outlook data without booting

CONS Pricey; smallish hard drive; underpowered integrated graphics; narrow viewing angle on display

SPECS 2.4GHz Core 2 Duo P8600; 2GB DDR2; 160GB hard drive; DVD±RW with LightScribe; 15.4-inch TFT; integrated Intel GMA X4500 HD; Windows Vista Business

Hewlett-Packard, 800-289-6947
www.hp.com

Direct Price \$1,387

The 6730b weighs a hair under six pounds and measures 1.3x14x10.5 inches (HWD). Its matte-silver finish and black keyboard are dull, but the 6730b has one decorative bit of flair: an LED-lit, touch-sensitive strip of quick-launch and volume-control buttons. (It even works when the notebook is off—simply tap the Info button to launch HP's QuickLook 2 for instant access to Outlook 2003/2007 data.)

Based on Intel's new Centrino 2 platform, our test unit came with a 2.4GHz Intel Core 2 Duo P8600 processor, 2GB of



RAM, a 160GB hard drive, a DVD burner with LightScribe, and Intel's GMA X4500 HD integrated graphics. The 15.4-inch wide-screen LCD has a native resolution of 1,280x800, an antiglare coating, and a fairly narrow viewing angle. The 6730b also supports Bluetooth and 802.11n Wi-Fi; other hardware perks include four USB ports, an ExpressCard slot, a memory-card reader, a VGA Webcam, and a fingerprint sensor. It also has a mini-FireWire port and a serial port.

A decent performer (except in games, thanks to its integrated graphics), the 6730b is a great choice for long trips. It lasted just under three hours in our battery-drain test, which means you should get close to six hours of runtime with the power-management features enabled. —Rick Broida

C For more: computershopper.com/laptops

Lenovo ThinkPad SL400

Sturdy performer has a stellar screen

LENOVO'S \$1,163 THINKPAD SL400 is a well-priced thin-and-light business system that has the sturdy feel (and bulky design) of a midsize.

With its smudge-resistant black finish and glossy cover, the SL400's design is pure corporate. The keyboard is soft and easy to work with, and fans of Lenovo's signature TrackPoint pointing stick will be happy to see it here. (There's also a traditional touch pad under the keyboard.) The 14.1-inch matte screen (running at 1,440x900) with an antiglare finish looks as good as (if not better than) some glossy screens we've looked at lately, and it's much better suited for a crowded conference room or office.

Besides looking good, the system's design also functions well, keeping it cool and silent. Its bulk and 5.5-pound weight—especially when paired with the optional nine-cell battery (the standard battery is a three-cell model)—push this system close to midsize models, but the unit more than makes up for this heft with its variety of connectivity



options: four USB ports, a FireWire jack, an ExpressCard slot, a multifunction memory-card reader, 802.11n Wi-Fi, VGA out, Bluetooth 2.0, and an HDMI output.

Our review unit, armed with a 2.26GHz Core 2 Duo P8400 and 2GB of RAM, demonstrated improved performance over other thin-and-lights in its price range, though the jump was far from dramatic. And gaming is not one of the ThinkPad SL400's strong suits—its 256MB Nvidia GeForce 9300M discrete GPU has limited potential.

Battery life was considerably stronger. With a nine-cell battery, the system lasted 2 hours and 59 minutes in our DVD-rundown test. Prospective DVD-watchers should also know that the speakers on the ThinkPad SL400 are a bit on the weak side. —Serguei Serbanov

EDITORS' RATING 8.2

0 BETTER >> 10

PROS Solid battery life; good overall performance; great display; comfortable keyboard

CONS A bit bulky; mediocre 3D performance

SPECS 2.26GHz Core 2 Duo P8400; 2GB DDR2; 160GB hard drive; DVD±RW; 14.1-inch TFT; Nvidia GeForce 9300M (256MB); Windows Vista Business

Lenovo, 800-915-1849
www.lenovo.com

Direct Price \$1,163

Acer Aspire One

Netbook is One step behind the competition

THOSE WHO HAVEN'T YET TRIED OUT A NETBOOK—the new category of cheap ultraportable laptops that have quickly followed on the heels of the Asus Eee PC's runaway success—may need only a few minutes with a model like the Acer Aspire One to understand the reasons behind their popularity.

Like others in the genre, the \$329 Aspire One is a featherweight (2.2 pounds) that's perfect for throwing into a bag or backpack or for typing away in bed. And, like the original Eee PC and the new MSI Wind U100, it uses Linux to keep startup and shutdown times short, and it offers a Windows XP option.

The Aspire One probably won't disappoint its target audience of students or users looking for an inexpensive, highly portable second system, though the 8GB of solid-state storage is a real liability. (The Windows XP version comes with a conventional hard drive.) Both versions of the Aspire One do offer a dedicated SD memory-card slot, an additional multiformat memory-card slot, and three USB ports, which you can use to attach external storage.

The glossy LED-backlit screen on the Acer has good viewing angles and is more than fine for everyday use, but it



PROS Quick startup; sharp display; includes Firefox browser, multitenant IM app

CONS Only 8GB of storage; three-cell battery has short life; vexing touch pad

SPECS 1.6GHz Atom N270; 512MB DDR2; 8GB solid-state drive; no optical drive; 8.9-inch TFT; integrated graphics; Linux; Linux Lite

Acer America, 800-915-1849
us.acer.com

Mfr. Est. Price \$329

gets washed out in bright light and suffers from a moderate amount of glare. Speaker volume is decent, though audio lacks warmth because there's almost no bass output.

The Aspire One uses Intel's new, low-power Atom mobile processor, but because its Linux OS needs fairly meager system requirements to run, the Acer comes with just 512MB of memory. (A \$349 Windows XP configuration comes with 1GB of RAM and a 120GB hard drive, and Acer also offers a \$399 XP version

with a 160GB drive and an extended-life battery.) We didn't experience any hiccups doing everyday tasks like word processing and Web browsing at the same time. Bootup time was indeed impressive, taking only 20 seconds to get to the main interface screen. It did take another 30 seconds, however, for the device to find and connect to our wireless network.

As you might imagine, a laptop that measures just 1.1x9.8x6.7 inches (HWD) doesn't have a full-size keyboard, but it is large enough to make touch-typing possible. We suffered the occasional spelling mishap with the slightly cramped keys, though, and had problems with the touch pad, even after we turned down its sensitivity.



Acer has gone to great lengths to make sure that the Linux underpinnings have been gussied up enough for consumers accustomed to a Windows-based GUI. The main interface is divided into four sections—Connect, Works, Fun, and Files—under which the Aspire One's apps are grouped. The home screen also features an Internet search bar to further speed up jumping online.

Free software is plentiful, including Firefox, a universal instant-messaging client, an e-mail client, an RSS reader, and direct links to Google Maps, Microsoft Hotmail, and Wikipedia. The free office suite OpenOffice.org helps fill out the Works quadrant; you get apps for word processing, spreadsheets, presentations, calculator functions, calendaring, contacts, and notes. Under Fun, you'll find a media jukebox, photo and paint apps, a utility to utilize the Aspire One's built-in Webcam, and a number of games. Files houses icons that let you access your documents, music, photos, videos, downloads, and miscellaneous files.

In addition to its memory-card slots and USB ports, the Aspire One offers VGA out, an Ethernet port, and headphone and microphone jacks. It ships with a three-cell battery, but because it doesn't feature an optical drive, we couldn't formally test its stamina with our DVD-playback benchmark. In our everyday use, however, it lasted roughly 2 hours and 20 minutes per charge. That duration doesn't really jibe with the idea of the netbook as an ideal traveling companion—if you're looking for the Aspire One to stay juiced for a cross-country flight, you'll need to secure the optional six-cell battery separately.

With its availability at Best Buy and Circuit City stores, the Aspire One is going to be successful. That doesn't make it the best choice in its category—particularly this configuration, with its puny amount of onboard storage—but it does have an appealing price, and it largely succeeds in showcasing the (albeit limited) charms of the netbook, a laptop that can finally serve as a lifestyle accessory for the masses. —Sean Portnoy

C For more: computershopper.com/laptops

Fujitsu LifeBook A6210

Versatile traveler for work and play



IF YOU NEED A NOTEBOOK suitable for both business and pleasure, the Fujitsu LifeBook A6210 merits serious attention. It has all the performance and features a business user could want, plus multimedia features for life beyond work.

The A6210 has solid build quality, and while it's not especially thin, the 6.6-pound system is still plenty portable. Its full-size keyboard is spill-resistant, with a positive key action. The 15.4-inch display is sharp and vibrant, delivering good image quality, a wide viewing angle, and a comfortable 1,280x800 native resolution. Audio quality from the built-in stereo speakers is rich and clean, but could use more top volume. We also wish Fujitsu had included media-control keys to complement its quick-launch and volume buttons.

The A6210's business features include a Webcam for videoconferencing a finger-

print reader; and Bluetooth, Gigabit Ethernet, and 802.11a/g/n Wi-Fi for connectivity. There are HDMI and VGA ports for outputting video, four USB ports, an external SATA port for connecting external storage, a FireWire jack, a memory-card reader, and PC Card and ExpressCard slots. (A Blu-ray optical drive is available as an option.) An optional ExpressCard TV tuner and remote control can turn the A6210 into a full-on home theater PC.

Equipped with a 2.26GHz Intel Core 2 Duo P8400, 3GB of RAM, and Windows Vista Home Premium (or Business), the laptop delivered strong results on our productivity tests, and lasted 1 hour and 40 minutes on our DVD-rundown test, typical for a machine in this class. The 128MB ATI Mobility Radeon HD 3470 graphics engine in our system proved adequate for casual gamers, but not for demanding 3D titles. Fujitsu backs the A6210 with a one-year warranty (expandable to three years), with 24/7 tech support. —*Jamie Besales*



EDITORS' RATING 8.6

0 BETTER >> 10

PROS Good performance; excellent keyboard; bright, vibrant screen; solid build quality; Blu-ray option

CONS Somewhat bulky; no dedicated media-control buttons

SPECS 2.26GHz Core 2 Duo P8400; 3GB DDR3; 250GB hard drive; Blu-ray reader/DVD±RW; 15.4-inch TFT; ATI Mobility Radeon HD 3470 (128MB); Windows Vista Home Premium

Fujitsu Computer Systems
856-968-4465
www.fujitsu.com/us

Direct Price \$1,349

For more: computershopper.com/laptops

HP Pavilion dv5t

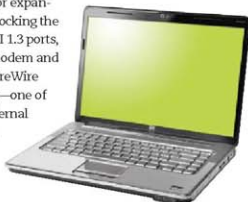
Entertainment looker flaunts media features

WHO SAYS TRAVEL has to be boring? HP aims to make it as entertaining as possible with the Pavilion dv5t, a notebook built as much for games, music, and movies as for everyday computing.

Glam and glossy, the 5.8-pound dv5t features a shiny black lid with an illuminated purple-and-white HP logo embedded near one corner, an LCD flush with the bezel, a dazzling silver keyboard, and a wrist rest and unusually smooth touch pad painted to match.

Like previous Pavilions, the dv5t sports an LED button strip just above the keyboard, with media controls such as mute, volume, and play/pause, plus wireless on/off and QuickPlay buttons. We found the volume-control bar a bit confusing: It's not immediately clear how you're supposed to interact with it.

HP earns top marks for expansion and connectivity, stocking the dv5t with VGA and HDMI 1.3 ports, a 5-in-1 media reader, modem and Ethernet ports, a mini-FireWire port, and four USB ports—one of which doubles as an external Serial ATA (eSATA) port. A slick, 23-button infrared remote is



included; when you're not using it, you can store it in the notebook's ExpressCard slot.

That remote will probably get quite a bit of use. There's no TV tuner, but if you're pairing the notebook with an HDTV (the 15.4-inch screen tops out at 1,280x800 pixels), you'll welcome the Blu-ray drive/DVD burner. The discrete 512MB Nvidia GeForce 9600M GT graphics card had no trouble cranking out 1080p video to an HDTV.

The dv5t also rocked our benchmark tests, eliciting stellar scores in our productivity benchmarks, though its 3D gaming results were less impressive. It earned a respectable 40 frames per second (fps) in our 1,024x768 E.E.A.R. test, but barely 20fps in Company of Heroes, and even lower scores at its native resolution. —*Rick Broida*

EDITORS' RATING 7.9

0 BETTER >> 10

PROS Strong performance; gorgeous keyboard and touch pad; stowaway Media Center remote; HDMI and eSATA ports; Blu-ray reader also burns DVDs

CONS Screen resolution doesn't leverage Blu-ray capabilities; awkward volume controls; TV tuner costs extra; so-so gaming performance

SPECS 2.53GHz Core 2 Duo T9400; 3GB DDR2; 250GB hard drive; Blu-ray reader/DVD±RW; 15.4-inch TFT; Nvidia GeForce 9600M GT (512MB); Windows Vista Home Premium

Hewlett-Packard, 800-289-6947
www.hp.com

Direct Price \$1,627

I've got the cutting-edge
technology that will
make your laptop zip.



NEW INTEL® CENTRINO® 2 PROCESSOR TECHNOLOGY.

With up to 50% faster performance when multitasking, it's our best-performing notebook technology ever. Find out more at intel.com/go/centrino

THE WORLD'S BEST NOTEBOOKS HAVE INTEL® CENTRINO® 2 INSIDE.



As measured using Photoshop® Lightroom™ comparing latest-generation Intel® Centrino® 2 processor technology-based notebooks with comparable frequency first generation dual-core Intel® Centrino processor technology based notebooks. Actual performance may vary. See <http://www.intel.com/go/consumer/benchmarks> for important additional information. For more information on why Intel® Centrino® 2 processor technology enables the best notebooks visit: <http://www.intel.com/performance/> ©2008 Intel Corporation. All rights reserved. Intel, the Intel logo, Centrino, and Centrino Inside are trademarks of Intel Corporation in the U.S. and other countries.



Chieftec CH-05

Tool-less case makes your build easy

DECENT IN BOTH APPEARANCE and functionality, the biggest thing Chieftec's \$129.95 CH-05 case lacks is excitement.

Measuring 18x8x21.3 inches (HWD), and clad in mostly silver with black accents, the CH-05 is definitely more ordinary than ostentatious, and it has plenty of room for a sensible collection of components: three external 5.25-inch drives, one external 3.5-inch drive, and six internal 3.5-inch drives. It also has space for seven full-size expansion slots.

We found the CH-05 sufficiently roomy—and extremely convenient—to work with. The tool-less construction was among the best we've seen, with slide-out rails for attaching hard drives, a pressure-sensitive (and, supposedly, vibration-reducing) retaining system for optical drives, and an easy-to-use metal bracket for securing expansion cards.

You will, however, need a screwdriver to replace or reconfigure either the included 600-watt modular power supply or any of the three preinstalled fans. The 120mm exhaust fan is fairly standard, but having two 90mm intake fans attached to the right wall of the case, blowing air across the hard drives and out the mesh in the removable left side panel, is a bit unusual. The lower section of the front panel, also right next to the hard drive, is composed of two grilles for still more ventilation, and there's more mesh on the front cover. You won't find any space for additional fans, though,

so you may have to settle for liquid cooling if you want extra heat removal.

Also strange was the placement of the front-panel ports (one FireWire and two USB, plus headphone and microphone) on the right edge—useful only if the computer is on the floor or desk to your left and your cables will reach far enough.

—Matthew Murray

EDITORS' RATING 7.0

0 BETTER 10

PROS Uncommonly good tool-less design; power supply included

CONS Limited fan space; inconvenient placement of front-panel ports; unexciting looks

Chieftec
www.chieftecusa.com

Mfr. Est. Price \$129.95

Raidmax IceCube

Spacious chassis has limited cooling potential

IF YOU'VE BUILT A FEW PCs over the years and are intrigued by small-form-factor (SFF) systems, you'll find the Raidmax IceCube an excellent starter kit.

Measuring 9x12x17 inches (HWD), the IceCube is much larger than a typical SFF chassis. The top panel, side panels, and motherboard tray are removable, which makes installing components easier.

The interior is relatively spacious, with room for up to four hard drives, two 5.25-inch drives, one internal 3.5-inch drive, and a regular-size power supply. Although room exists inside for an extra-long power supply, the bracket that supports it is too small to support such a model (there's also enough room for a long—but not an extra-long—video card).

The case has four PCI slots, which should be adequate for most expansion needs. Only Micro-ATX motherboards will fit inside the chassis, of course. The front of the unit features two USB ports, FireWire, and headphone and mic jacks.

Cooling is provided by a rear 120mm fan, but there's no intake fan in the front, a common problem with SFF cases. Still, Raidmax includes two holes on the rear of the chassis to be used with an external liquid-cooling system, an uncommon and appreciated feature on an SFF chassis. Raidmax has also tried to make the system quiet: Both hard drive cages are adorned with vibration- and noise-absorbing strips of rubber, along with rubber-grommet mounts that further reduce vibration.

The IceCube is a fine "tweener" case if you've built a desktop PC before but are worried that constructing an SFF system would be a hassle. It's large enough to make the process much easier than usual, yet small enough that it could sit unobtrusively on a desk.

—Josh Norem

EDITORS' RATING 7.6

0 BETTER 10

PROS Elegant design; lightweight; holds four hard drives; removable motherboard tray, side/top panels

CONS Doesn't support extra-long PSUs, video cards; only one cooling fan

Raidmax, 626-934-9999
www.raidmax.com

Direct Price \$109.99



For more: computershopper.com/components

Asus EAH4870X2

The best single-card graphics performance available



THE ASUS EAH4870X2 is a powerhouse video card that uses ATI's new Radeon HD 4870 X2 design, which places two top-of-the-line 4870 GPU chips on a single board, backed by a whopping 2GB of video memory. The 4870 X2 puts ATI back in competition at the top end of the 3D-gaming market in terms of both performance and price.

The EAH4870X2 is functionally equivalent to two HD 4870 cards running in CrossFireX mode, but on a single card. Each GPU is backed by 1GB of dedicated GDDR5 memory, and an onboard PCI 2.0 bridge chip allows the two subsystems to communicate. This means you don't need a CrossFireX-compatible motherboard, but you do need a 600-watt power supply, both

six-pin and eight-pin PCI Express power cables, and room for a 10.5-inch-long board that blocks an adjacent slot. The EAH4870X2 is also much louder than the single-GPU HD 4870 because of its fan.

The board includes a pair of dual-link DVI connectors, an HDMI adapter with onboard audio, and an analog component-video/S-Video output. Unlike Nvidia's



dual-GPU GeForce cards, you can use dual monitors with the EAH4870X2 without having to disable the second GPU.

The EAH4870X2 delivered excellent image quality in our video-playback tests, and for gaming proved the fastest single video card we've tested to date. At 2,560x1,600 resolution, the EAH4870X2 turned in 41 frames per second (fps) in World in Conflict, 54.7fps in Company of Heroes, and 116fps in F.E.A.R. Dual-GPU solutions like the EAH4870X2 require the drivers to support the game you're playing with a CrossFireX profile, though not all titles benefit from the second GPU. —Denny Atkin

EDITORS' RATING **9.3**

0 BETTER >> 10

PROS Extremely fast; includes HDMI adapter; dual-GPU acceleration works even with multiple monitors

CONS Larger; some applications don't use the second GPU; fan gets noisy at load

AsusTek Computer, 502-995-0883
usa.asus.com

Mfr. Est. Price **\$549**

For more: computershopper.com/components

Gigabyte MA790GP-DS4H

A feature-loaded motherboard for AMD media machines

ONE OF THE FIRST MOTHERBOARDS to feature AMD's new 790GX chipset, the Gigabyte MA790GP-DS4H is one of those rare jack-of-all-trades devices that offer good performance for a wide range of users.

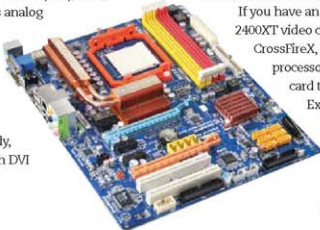
This Socket AM2+ board can accommodate CPUs ranging from low-power usage Athlon X2 chips to the rapid Phenom X4 9950. The 790GX chipset offers a number of innovations, including a faster built-in GPU, increased energy efficiency when idle, and improved overclocking support with the AMD OverDrive utility's Advanced Clock Calibration feature. It can accommodate memory speeds up to DDR2 1066; its integrated Radeon HD 3300 graphics processor features 128MB of dedicated DDR3 1333 memory.

In addition to ports for USB (12), FireWire (two), PS/2, a mouse, and a keyboard—as well as analog and digital audio outputs—the MA790GP-DS4H has motherboard connectors that allow you to add legacy serial and parallel ports. All that's missing is external Serial ATA (eSATA).

The MA790GP-DS4H is HDTV-ready, with an HDMI 1.3 port alongside both DVI

and VGA connectors. Plus, it offers full DirectX 10 (DX10) support and accelerated video playback. Audio comes courtesy of an ALC889A audio codec that supports eight-channel Dolby Digital Live sound. The ALC889A supports Full Rate Lossless Audio for Blu-ray discs, which, along with its fanless design and power-saving features, makes the MA790GP-DS4H appealing in a home theater PC.

If you have an ATI Radeon HD 3450, 3470, 2400 Pro, or 2400XT video card, you can plug it in and enable Hybrid CrossFireX, which uses the motherboard graphics processor in conjunction with the GPU on the graphics card to boost performance. Just know that the PCI Express slots run in x8 mode, which doesn't quite deliver the performance of 790FX-based motherboards that can run two slots in x16 mode. —D.A.



EDITORS' RATING **8.4**

0 BETTER >> 10

PROS Full-featured motherboard; built-in GPU is great for video playback; Dolby Digital Live audio; wide selection of ports

CONS No eSATA, limit of six SATA ports might frustrate power users; only supports x8 mode on the dual graphics slots

Gigabyte Technology, 626-854-9338
www.gigabyte.us

Mfr. Est. Price **\$150**

Netgear Wireless N Upgrade Kit (WNEB3100)

The easiest way yet to upgrade to dual-band Draft N



IF YOU'RE CURRENTLY RUNNING an 802.11b/g network and want to make the switch to the faster 5GHz Draft 802.11n standard without starting from scratch, the Netgear Wireless N Upgrade Kit (WNEB3100) is an easy way to make everyone in your home happy. It plugs into your existing router, adding a new 5GHz network alongside your old 802.11b/g network while creating a dual-band scenario where adapters of all ages can connect wirelessly to the network. Netgear also includes a dual-band USB network adapter, but even though the access point works with Windows, Mac, and Linux, the USB adapter works only in Windows.

The WNEB3100 is basically Netgear's HD/Gaming 5GHz kit with just one access point instead of two. The kit includes the unit, which can serve as either an access point or a bridge, and a dual-band USB adapter. The unit's front features activity lights (which can be turned off) and a Wi-Fi Protected Setup button. On the rear are two Fast Ethernet ports, a mode switch (bridge, access point, or auto), and a factory reset button.

Netgear preconfigures the kit to make installation

simpler, and we admit that this was one of the easiest—if not the easiest—installations we've ever experienced. We simply connected the unit to our existing 802.11g router with the provided Ethernet cable and waited a few minutes. (These instructions were printed on a foldout card inside the box.) Then we went to our PC and ran a detection



and the ability to lock your wireless settings to prevent miscreants from changing them. All of the standard controls are available, too, such as viewing connected clients and looking at IP addresses. You also get a wizard if you want to change the stock settings. The WNEB3100 is missing features such as port forwarding, VPN pass through, and a firewall, but since it's attached to another router, that router would need to supply these anyway.

Next, we headed over to our laptop and ran the installation CD for the USB 802.11n adapter. After we installed the drivers and the network-monitoring utility, we inserted the device. It detected both our new 5GHz network and our old network.

To test the

WNEB3100's speed, we performed our standard file-transfer tests at both 50 and 100 feet. The unit's 5GHz performance was about average, but it was significantly faster than the last N upgrade kit we tested, the Trendnet 300Mbps Wireless Easy-N Upgrader. From 50 feet away, the WNEB3100 took 21 seconds to transfer 100MB of data, and 1 minute and 54 seconds to transfer 500MB. For comparison, a standard dual-band router like the Linksys Simultaneous Dual-N Band router took 49 seconds for 100MB, and 3 minutes and 5 seconds for 500MB, so the WNEB3100 is faster in this close-range scenario. At 100 feet, the kit took 39 seconds for 100MB, and 3 minutes and 16 seconds for 500MB, which is so-so.

Its 5GHz range was also average; we were able to stream media from up to 100 feet away, but once we moved about 10 feet farther, we couldn't stream anymore, though we could still surf the Web. Another 10 feet and we lost the signal completely. Because 5GHz routers are always a bit finicky past 100 feet, our experience with the WNEB3100 was typical.

Though the WNEB3100 isn't as fast as some stand-alone dual-band routers, its performance is still respectable. Factor in its suitably simple setup and configuration process, and you have an upgrade we highly recommend. —Josh Norem



PROS Easy setup; configuration runs alongside 802.11b/g networks; good performance; includes USB network adapter; supports Windows, Mac, Linux

CONS USB adapter works only in Windows; not the fastest 802.11n router we've tested

Netgear, 408-907-8000
www.netgear.com

Mfr. Est. Price \$125

utility from the included CD; it found the device on our network. We double-clicked the device name, and it automatically opened the browser-based administration utility. You usually have to enter the browser window to configure the network, but we quickly discovered that Netgear had already set everything up for us. Not only did our network have a name, but Wi-Fi Protected Access (WPA/WPA2) security was also already in place, and our router even had a preselected password that was printed on the back of the device. The whole setup took about five minutes—blissfully fast as most network-configuration tasks go—and we give Netgear kudos for streamlining the installation process.

Poking around in the Web-based administration window, we noted the WNEB3100's advanced features, which include Media Access Control (MAC) filtering, Wireless Intelligent Stream Handling (WISH) for prioritizing network traffic,



For more: computershopper.com/networking



Buffalo MiniStation DataVault

Encryption drive is rugged, speedy

BUFFALO'S MINISTATION DATAVAULT looks unassuming on the outside, but inside you'll find a hard drive that offers government-grade 128-bit Advanced Encryption Standard (AES) encryption with shock absorption, making it an attractive portable-storage option for those who tend to bump their tech around.

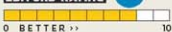
Using the MiniStation DataVault is easy. There's no software to install to activate the encryption—it happens automatically when you unplug it from your computer. When you connect it to a PC or Mac via USB, the DataVault will ask for your password, which is nearly impossible to recover if you ever forget it. (Mac users have to download a small app that starts the password process, but the password is never stored on the computer.)

Unlike Seagate's Black Armor (see review at right), the MiniStation DataVault doesn't have a centralized place to adjust settings or backup options. Instead, backup is handled by a separate bundled utility, Memeo Auto Backup. All told, the software and setup process isn't as polished as the Black Armor's, but the included software isn't crucial to the drive's operation.

File transfer rates are good. It took 8 minutes and 30 seconds

to transfer a 10GB folder of mixed-media files from our test PC to the drive, and 6 minutes and 19 seconds to do the reverse. Buffalo claims that the included Windows-based TurboUSB software will speed up the transfer rate, but we beg to differ: We achieved 8 minutes and 16 seconds in our computer-to-drive transfer using TurboUSB, and it shaved off just a second on our drive-to-computer transfer. —Les L. Shu

EDITORS' RATING 8.0



PROS Shock-absorbing case; Mac-compatible; good performance; built-in data encryption; easy to use

CONS Software, setup process not as polished as it could be; TurboUSB software wasn't effective during testing

Buffalo Technology, 800-456-9799
www.buffalotech.com

List Price \$129 (160GB);
\$209 (320GB)

Maxtor Black Armor

Affordable storage for sensitive data

WITH A SLEEK EXTERIOR that's straight out of a spy movie—plus a name to match—the Maxtor Black Armor portable hard drive from Seagate offers government-grade encryption for people with sensitive files. Although enterprise and government users are this device's target audience, even the general consumer can afford to add some protection to his or her data.

The Black Armor uses the 128-bit Advanced Encryption Standard (AES) algorithm technology. Because encryption occurs on the drive itself, anything stored on it is automatically protected. It's easy to use: Simply plug the drive in via USB and enter the pass-

word you created during setup, and the Black Armor unlocks and mounts like any ordinary hard drive. To lock it, disconnect the USB cable from your computer. If you can't remember your password, your only option is to wipe out the entire drive and reset the settings. (You can install the included Maxtor Manager app to handle settings and set up backups.)

In our testing, the drive's transfer speeds were quite fast. A 10GB folder of mixed-media files took 7 minutes and 31 seconds to copy from our test computer to the drive. The reverse process took 6 minutes and 52 seconds.

Although the casing looks nice, we noticed that it scratches easily. We would have also liked the option of using a USB Y cable that handles power and data through two USB ports, for older machines that don't have a powered USB port. And Mac users are out of luck: The Black Armor is designed for Windows XP and Vista only. —L.L.S.

EDITORS' RATING 8.0



PROS Easy to use; automatically locks when disconnected; Maxtor Manager offers one-stop shop for drive and backup settings; hardware encryption; fast transfer speeds

CONS Requires powered USB port; scratches easily; not Mac-compatible

Seagate Technology, 800-732-4283
www.maxtor.com

Direct Price \$169.99 (320GB)



For more: computershopper.com/peripherals

Samsung SyncMaster 305T

Excellent big screen is best connected to a PC

THE SAMSUNG 305T is a top-quality 30-inch monitor with crisp graphics, excellent color reproduction, and a very fast refresh rate. Though it lacks the multiple inputs and other extras of some high-end displays, it's an excellent choice if you're looking for a gargantuan monitor that's designed specifically for your PC.

The 305T's 2,560x1,600 maximum resolution gives you plenty of room to keep multiple applications open at the same time, and the large size makes for immersive wide-screen gaming.

The colors reproduced are actually true to life, as evidenced by digital photos viewed at default color settings and by our DisplayMate (www.displaymate.com) tests. Gray-scale gradation is smooth, the 1,000-to-1-rated contrast ratio

makes for deep blacks and bright whites, and the display geometry is very accurate. Gamers and videophiles will appreciate the monitor's 6-millisecond response time, which is fast enough to eliminate any motion artifacts during high-speed gaming and video playback.



PROS Huge display; accurate color; fast refresh rate

CONS Only one input; lacks HDCP support

Samsung, 800-726-7864
www.samsung.com

Mfr. Est. Price **\$1,499**

The 305T has only a single input for connection to a dual-link DVI video card. (Single-link cards can't achieve the 305T's native 2,560x1,600 resolution.) That's fine for desktop usage, but—given that monitors this size are sometimes shared with cable boxes, game consoles, and other entertainment components—additional inputs would have been welcome. The monitor lacks High-Bandwidth Digital Content Protection (HDCP) support, which may limit playback resolution on some copy-protected video content such as Blu-ray movies. If you plan to play games or use other 3D applications at the 305T's high native resolution, you'll want to pair it with a fairly fast video card that features dual-link DVI output at the level of an ATI Radeon HD 3870, an Nvidia GeForce 7600 GT, or above. —Denny Atkins



For more: computershopper.com/lcd-monitors

ViewSonic VX1962wm

Glamorous display has some performance blemishes

WITH ITS PEDESTAL-LIKE STAND and curvy accents, the ViewSonic VX1962wm 19-inch wide-screen LCD is a svelte monitor that eschews the boxy rectangle shape favored by most manufacturers. Despite a few performance quirks, the \$295 VX1962wm will satisfy all but the most demanding of users.

The VX1962wm has a native resolution of 1,680x1,050, which can handle high-definition content up to 720p. The monitor's specs are a 2-millisecond response rate (gray-to-gray), a brightness of 300 candelas per square meter, and a 1,000-to-1 contrast ratio (6,000-to-1 dynamic). The built-in Sound Retrieval System surround-sound speakers are a nice plus. We usually complain about monitor speakers being too



tinny, but this set is actually too heavy on the bass.

For general computing tasks such as Web surfing or word processing, the VX1962wm is perfectly adequate. But our DisplayMate tests indicated a few quirks. With a VGA connection, our test unit excelled at the high end of the gray-scale test but had difficulties reproducing black at the dark end. It demonstrated weakness at the dark end of the color-ramping test but did very well with color scaling. Font scaling was excellent, but the monitor exhibited some ghosting and streaking.

DVI connections are usually an improvement over VGA connections, but with this display, the connection was slightly weaker with the high end of the gray-scale test, and we noted a problem with the dark end of the color-scaling test. This connection had no issues, however, with the high-contrast and midrange streaking tests. —Les L. Shu



PROS Nice design; built-in virtual-surround-sound speakers; generally good performance

CONS Some inconsistent performance quirks between analog and digital connections; speakers on the boomy side

ViewSonic, 800-888-8583
www.viewsonic.com

Mfr. Est. Price **\$295**

Extreme Performance to Excite Your Senses



Win a 300Mbps Dual Band Wireless N Router
at www.trendnet.com/giveaway

Use promotional code MP09CS09 to double your prizes



Wireless N Gigabit Router TEW-633GR

Extreme Performance

Enjoy a truly seamless experience with unparalleled wired and wireless throughput speeds

Gaming Optimized

Eliminate jitter with StreamEngine™ technology and preconfigured gaming ports

Advanced Security

Protect your network with the latest encryption standards, one step security synchronization and a wireless on/off button

Visit www.trendnet.com or call 1-888-326-6061

No purchase necessary to win. Void where prohibited by law. Sweepstakes is open to legal residents of the United States who are at least 18 years of age. Entries must be received from September 16, 2008 to December 15, 2008. One entry per person. For a complete set of rules, visit www.trendnet.com/giveaway



Stay Atop of the Food



Deliver an intensely visual experience that's a step up from dual-core with the leading-edge technology of the AMD Phenom™ X3 8000 Series triple-core processor. It's dual plus one, with the power to perform.

- More power to take advantage of graphically rich applications
- Improved multitasking to power your digital lifestyle
- An amazing HD computing experience when combined with an AMD 780-Series chipset and ATI Radeon™ HD 3200 graphics

X3



Reduced prices now available at:



TigerDirect.com



NCIX.com

Chain



AMD Phenom™ X4 Quad-Core Performance at Your Fingertips:

- Power visually stunning digital media and entertainment
- Systems with DirectX®10 capability allow you to immerse yourself in a more realistic, high resolution gaming experience.
- Extreme total system bandwidth using HyperTransport™ 3.0 technology to experience 1080p high-definition video.
- Don't burn more power than you need with Cool'n'Quiet™ 2.0 technology



www.amd.com

AMD
Smarter Choice

© 2008 Advanced Micro Devices, Inc. All rights reserved. AMD, the AMD Arrow Logo, AMD Phenom and combinations thereof and Cool'n'Quiet are trademarks of Advanced Micro Devices, Inc. DirectX is a registered trademark of Microsoft Corporation in the U.S. and/or other jurisdictions. HyperTransport is a licensed trademark of the HyperTransport Consortium. Other names are for informational purposes only and may be trademarks of their respective owners.



HP Photosmart A636 Compact Photo Printer

Intuitive printer produces high-quality prints

IF YOU'RE LOOKING for a quick and easy way to print 4x6 and 5x7 snapshots, it doesn't get much easier than HP's new Photosmart A636 photo printer—but it does get quicker. This compact printer has a large 4.8-inch touch-screen LCD that makes a wide array of tasks incredibly simple. Its print speeds are a little slow and the Photosmart Essential software needs work, but thankfully, you don't need to use the software to produce excellent prints.

The A636 is very small and—at just 3.3 pounds—portable. You can even run it off a battery (\$24.99) if you're on the road. HP estimates that the A636's cost per page for 4x6 prints is roughly 29 cents, which is in line with other snapshot printers.

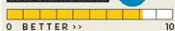
Though you can print pictures from a PC connected via USB cable (which is not included), the A636 also functions quite well without a PC, since it features a multifunction card reader.

Setup was incredibly simple and took only a few minutes. Even better, the printer's drivers are stored on the printer itself—a great feature indeed. HP gives you the option of installing its printing wizard software, Photosmart Essential,

but it's sluggish, and we don't recommend it.

In terms of print speed, the A636 took 1 minute and 49 seconds for a 5x7, and 1 minute and 17 seconds for a 4x6, which is a little slow. But print quality is as high as the 4,800x1,200 resolution would suggest—it's excellent. —Josh Norem

EDITORS' RATING 8.2



PROS Sublimely simple installation; huge touch-screen LCD; good print quality; highly portable

CONS Slow print speeds; optional software is poorly designed

Hewlett-Packard, 800-752-0900
www.hp.com

Direct Price \$149

Brother MFC-6490CW

An excellent printer with a small price tag

BROTHER'S NEWEST all-in-one inkjet is a *wunderkind* of sorts that delivers on the promise of a single machine that can accomplish any printing task with excellent results. It's even network-ready for both wireless and wired installations, and at just \$299.99, it's surprisingly affordable. Its print speeds are a bit slow, but the 6490CW is still one of the best all-around printers we've tested.

Though it'll work just fine in your home, the 6490CW is billed as a "professional series" printer, thanks to its feature set and XXL size. It's so big because its dual paper trays and scanning bed are big enough for 11x17 ledger paper. A couple of caveats: Manual duplex mode is available, but not auto-duplexing, and if you want to print on glossy paper, you'll have to remove all the paper from the first tray. The ink-level software was also inaccurate.

As for controls and connections, the front of the unit has an easy-to-read 3.3-inch wide-screen display, a USB PictBridge port, and a multifunction card reader. The 6490CW comes with four high-volume ink cartridges, making for an affordable 6 cents per color page and just 3.5 cents for black and white.

In our print-speed tests, the 6490CW fared poorly with documents but decently with photos. It required 2 minutes and 57 seconds to print out our 10-page test document of text and photos, but just 37 seconds for a 4x6 photo. Print quality of both photos and text was excellent on plain paper and on glossy stock. —J.N.

EDITORS' RATING 8.4



PROS Great features; wireless/wired networking prints; scans ledger-size sheets; multifunction card reader; affordable; low cost per page

CONS Slow print speeds; ink-level software is balky; must remove plain paper from tray to print to glossy

Brother International, 877-276-8457
www.brother-usa.com

Mfr. Est. Price \$299.99



For more: computershopper.com/printers

Nikon Coolpix S210

Well-rounded design, but sluggish shooting

THE NIKON COOLPIX S210 (\$179.95) is a sleek and stylish camera that's easy to hold, but its slow performance may turn off anyone who isn't a casual user.

The good-looking 8-megapixel S210 is Nikon's thinnest model, but the S210's small body lends itself only to a 2.5-inch LCD and no viewfinder. On the plus side, the LCD produces crisp images, though they can be difficult to see under bright light. The 3x optical-zoom lens offers electronic image stabilization.

The S210 also has an interface that is not intimidating and can be mastered quickly by a beginner. The camera comes with four primary shooting modes: auto, high ISO, scene, and movie. The 15 scene modes include Landscape, Night, Party, Beach/Snow, Sunset, Museum, Backlight, and Fireworks.

Outdoors, the S210 takes some impressive images. Photos of flowers and plants in a garden produced bright, vibrant, accurate colors. Not only was color representation spot-on, but photos were also crisp and clear when taken in all of



the camera's scene modes and in most levels of lighting. Images showed a bit of blurriness in lower-lit shots—as well as when we zoomed in all the way—but were still adequate for a camera at this price point.

As for speed, startup time is a snappy 1.1 seconds. Shutter lag (1.7 seconds) is also impressively short for a compact camera. Shot-to-shot time, though, slows down to almost 4 seconds and, with flash enabled, it drops to a glacial 9 seconds. If speed between shots is important, this may not be the right camera for you. —Jonathan Rougeot

EDITORS' RATING **7.3**

0 BETTER >> 10

PROS Nice design; easy-to-use interface; produces respectable images for the price

CONS Very slow shot-to-shot time; smaller LCD; no viewfinder

Nikon, 800-645-6687
www.nikonusa.com

List Price **\$179.95**

For more: computershopper.com/digital-cameras-camcorders

Casio Exilim EX-Z200

Easy-to-use shooter is feature-rich

THE \$299.99 10-megapixel Casio Exilim EX-Z200 is the company's first camera to feature a 28mm lens, capable of taking wide-angle photos. Its many consumer-friendly features make it a perfect camera for beginners, and YouTube users will love how easy it is to upload video. Performance is sluggish and the case design is uninspired, but otherwise, there's a lot here to like.

The usefulness of the 28mm lens is apparent from the first moment you view a shot: This camera's wide-angle photos are impressive, as is the 4x optical zoom lens, which allows for telephoto focal length that's surprising for such a tiny camera.

The Z200 offers a whopping 39 scene modes, each illustrated on the LCD with photos and text, which is good news for beginners trying to find the right



mode. The smile-detection feature is impressive—in test after test, the shutter refused to go off until the subject was smiling. The charge-coupled-device-shift image stabilizer also worked well, eliminating blurriness at slower shutter speeds.

The no-brainer YouTube function helped us shoot and upload a 30-second video in about three minutes. Video quality is respectable for a point-and-shoot, offering 30 frames per second at 640x480 resolution; image quality is also admirable for a point-and-shoot at this price. Color representation is accurate, and with all of the useful shooting modes, it's hard not to take a good shot.

Alas, startup time is sluggish at 2.2 seconds, and shot-to-shot time is also ho-hum, at 3.7 seconds. With flash, shot-to-shot is even slower, at 4.2 seconds. —J.R.

EDITORS' RATING **8.1**

0 BETTER >> 10

PROS Good image quality; 39 scene modes; easy uploads to YouTube; smile-detection, image-stabilization features work well

CONS Slow; humdrum design

Casio America, 800-836-8580
www.casio.com

List Price **\$299.99**



Audio-Technica QuietPoint ATH-ANC3

Serious no-noise sound—at an affordable price

PROFESSIONAL AUDIO EQUIPMENT maker Audio-Technica's first consumer line of QuietPoint headsets, the ATH-ANC3 (\$169), earns high marks for quality and value.

The ATH-ANC3 earbuds are compact and stylish, and an attached control box houses an active noise-reduction module. The earbuds felt comfortable and light in our ears, but the control box could be quite a nuisance, as the single AAA battery's weight dragged down the earbuds, sometimes pulling them out as we jogged.

The ATH-ANC3's noise reduction works by dynamically adjusting the white-noise frequency based on input from a pair of microphones built into the earpieces. In our tests, the noise reduction did improve overall sound quality, providing a bit more bass response, although it can drown out backing vocals.

Using neodymium drivers, the ATH-ANC3 delivered audio fidelity that was rich and warm. We tested the headphones across several genres of music. Bass response was very good, although some funky bass lines came off a bit flat. Middle and high frequencies rang through clear as a bell. Percussion sounded sufficiently gravelly, while violins positively sparkled.

Included are three sets of rubber ear tips for customizable comfort, an extender cord, an airline adapter, and an AAA battery inside a spacious hard case. Given the competitive price

point, the extra goodies are a welcome surprise.

The ATH-ANC3 earbuds are solidly built, and they come with a versatile set of accessories. If you're the extremely active type, the noise-reduction module can be a bit unwieldy, but if you're relaxing on a flight or reclining at home or the office, you'll have an easy time losing yourself in the ATH-ANC3's rich sound and high-quality noise reduction. —Mike Spitaleri

EDITORS' RATING 7.8

0 BETTER >> 10

PROS Good audio fidelity; wide range of tones; frequencies; comes with hard case; extra earplugs of varying sizes

CONS Bulky noise-cancellation module can dislodge earbuds during movement; active noise-cancelling can drown out backing vocals

Audio-Technica, 330-686-2600
www.audio-technica.com

List Price \$169

Etymotic Hf2 Headset + Earphones

Excellent for calls, not so good for music

ETYMOTIC RESEARCH'S \$179 Hf2 Headset + Earphones is billed as a high-fidelity, hands-free premium accessory for the iPod and both versions of the iPhone, as well as other music players and cell phones that accept a 3.5mm headphone jack.

With its light weight and size, the Hf2 fit snugly into our ears and hardly budged even during strenuous exercise. We wish, however, that the company included a 2.5mm adapter, which would allow the headset to be used with many other cell phones.

As a headset, the Hf2 shines. Inside a crowded mall with lots of echo and chatter, we were able to speak naturally and hear calls perfectly without straining to listen or pulling the microphone up to our lips. In fact, callers reported that our voice was isolated from (abundant) ambient noise while we were speaking.

In our music tests, however, audio fidelity was flat and dry. While rock music sounded fine, with good response on mid-range vocals and high-pitched guitar solos, electronic music sounded terrible, as many of the gradient bursts of bass were lost in the narrow frequency range. Live music sounded dull, and talk podcasts sounded as though they were recorded inside a cardboard box. On a rumbling subway ride, the Hf2's sound isolation was a bit hum-drum. The music was audible, but ambient noise did bleed through quite a bit.

It seems that Etymotic favored call quality and functionality over audio playback. Still, we were disappointed by the Hf2's audio quality. As hands-free headsets go, you could do a lot worse—but you could do a lot better, too. —M.S.

EDITORS' RATING 6.5

0 BETTER >> 10

PROS Excellent voice-call quality; lightweight; snug fit; simple design

CONS Poor music fidelity; lack of a 2.5mm adapter

Etymotic Research, 888-389-6684
www.etymotic.com

List Price \$179



For more: computershopper.com/reviews

Cyberpower recommends Windows Vista™ Home Premium



GAMER **XPLORER X5-7800** *from \$ 1059*

- Intel® Centrino® Duo 2 Technology
 • Intel® Core™2 Duo Processor
 • Intel® PM45 Chipset
 • Intel® WiFi Link 5300 802.11 A/G/N
Genuine Windows Vista™ Home Premium
 2GB PC6400 800 Memory
 250GB SATA150 Hard Drive; 8X DVD+RW Drive
 NVIDIA® GeForce® Go 9600 GT 512MB
 15.4" WXGA TFT Display 1280x800 Pixels

- 10/100/1000 Network Card & 56K V.92 Modem
- 4-in-1 Built-in Media Reader
- 1 PCMCIA Type II Slot
- 1 Firewire IEEE 1394 & 3 USB 2.0 Ports
- 3 Hours Battery Life
- Weight only 6.8 Lbs; Free Carrying Case
- 1 Year Limited Warranty
+ Lifetime Toll Free 24/7 Techsupport

Black + 6 Custom Colors to Choose From



Intel® Core™2 Duo Processor	
(6MB L2 Cache, 1066MHz FSB)	
T9800 2.80Ghz	\$ 1425
P9500 2.53Ghz	\$ 1225
T9400 2.53Ghz	\$ 1185
(3MB L2 Cache, 1066MHz FSB)	
P8600 2.40Ghz	\$ 1105
P8400 2.26Ghz	\$ 1059



GAMER INFINITY **SLI¹⁵⁴ GT** **from \$ 699**

- NVIDIA® nForce™ 750i SLI™ Chipset MB
Supporting 2 Way SLI™
Genuine Windows Vista™ Home Premium
Corsair® 2GB PC6400 DDR2 800
Dual Channel Memory
32GB 7200RPM SATA-II 3.0Gb/s
16MB Cache Hard Drive
(2) NVIDIA® GeForce™ 9400 GT 512MB
LG 22X DVD±RW Drive & 16X DVD-ROM

- High Definition 7.1 Surround Sound
- 600Watt Subwoofer Speakers
- Logitech Keyboard & Optical Wheel Mouse
- X-Jupiter Jr. Mid-Tower Case w/ 680Watt SLI™ Power Supply
- Asepek Liquid Cooling System
- Free 802.11G Wireless PCI Network Adapter

Black + 3 Custom Colors to Choose From



Intel® Core™2 Duo Processor	
(12MB Cache, 1333MHz FSB)	
Quad Q9650 3.00GHz	\$ 1135
Quad Q9550 2.83GHz	\$ 915
(6MB Cache, 1333MHz FSB)	
Quad Q9400 2.66GHz	\$ 850
(6MB Cache, 1066MHz FSB)	
Quad Q8600 2.40GHz	\$ 769
(6MB Cache, 1333MHz FSB)	
E6800 3.33GHz	\$ 850
E8500 3.16GHz	\$ 775
E8400 3.00GHz	\$ 755
(3MB Cache, 1066MHz FSB)	
E7200 2.53 GHz	\$ 699



from \$ 955
GAMER INFINITY
9800 GT

- NVIDIA® GeForce™ 750i SLI™ 2xway SLI™**
Supporting 2 Way SLI™
- Genuine Windows Vista™ Home Premium**
- Corsair® 4GB PC6400 DDR2 800
Dual Channel Memory
- 500GB 7200RPM SATA-3 3GB/s/16MB Cache Hard Drive
- NVIDIA® GeForce™ 9800 GT 512 MB DDR3
LG 22X DVD±RW Drive & 16X DVD-ROM
- High Definition 7.1 Surround Sound
- 600Watt S/Silverstone Speakers
- Logitech® Keyboard & Optical Wheel Mouse
- X-Setup Mid-Tower Case w/ See Through Window
- 580Watt SLI™ Power Supply
- Asustek Liquid Cooling System
- Free 802.11G Wireless PCI Network Adapter
- Add Video/Screen 015W 19" 5ms
- Active Matrix SXGA Gaming LCD Display for \$199

-

(12MB Cache, 1333MHz FSB)	
Extreme QX9650 3.00Ghz	\$ 1839
Quad Q9650 3.00Ghz	\$ 1359
Quad Q9550 2.83Ghz	\$ 1125
(8MB Cache, 1333MHz FSB)	
Quad Q9400 2.66Ghz	\$ 1065
(8MB Cache, 1066MHz FSB)	
Quad Q6600 2.40Ghz	\$ 989
(6MB Cache, 1333MHz FSB)	
E8600 3.33Ghz	\$ 1065
E8500 3.16Ghz	\$ 975
E8400 3.00Ghz	\$ 955

12MB Cache, 1333MHz FSB)	
Extreme QX650 3.06Ghz	\$ 2085
Quad Q9650 3.06Ghz	\$ 1625
Quad Q9550 2.83Ghz	\$ 1399
(0MB Cache, 1333MHz FSB)	
Quad Q9400 2.86Ghz	\$ 1345
(6MB Cache, 1066MHz FSB)	
Quad Q8600 2.40Ghz	\$ 1275
(6MB Cache, 1333MHz FSB)	
E8600 3.33Ghz	\$ 1345
E8500 3.18Ghz	\$ 1259
E8400 3.06Ghz	\$ 1235
(3MB Cache, 1066MHz FSB)	
E7200 2.53Ghz	\$ 1165



from \$ **1185**
GAMER INFINITY
8800 PRO SE

- NVIDIA® GeForce™ 750i SLI™** Chipset M/B
 Supporting 2 Way X16 SLI™
Golden Windows Vista™ Home Premium
 Corsair® ZGB PC6400 DDR2 800
 Dual Channel Memory
 SUGEK 7200RPM SATA II 3.0GB/s/1s
 19.5in LCD Screen Hard Drive
 NVIDIA® GeForce™ G1X 260 64MB
 LG 22X DVD-RW Drive & 16X DVD-ROM
 High Definition 71 Surround Sound
 Logitech Keyboard & Optical Mouse
 CoolerMaster Case Sport Gaming Tower Case
 880Watt SLI™ Power
 Airstek Liquid Cooling System
 Free 802.11n Wireless PCI Network Adapter
 Active ViewSonic VG2231P 22" SXGA
 Active Matrix Gaming LCD Display for \$265



Extreme Performance

**All The Desktop Systems Come with
3 Year Limited Warranty + Lifetime
Toll Free 24/7 Techsupport**

TOLL FREE 800.707.0393 WWW.CYBERPOWERPC.COM

GoLive2 Stix 200

Motion-sensing controller isn't ready for prime time

GOLIVE2'S STIX 200 (\$49.99 for a starter kit) is a motion-sensing wireless controller that can easily be mistaken for Nintendo's Wii Remote. Unfortunately, the design is the only thing they have in common—the Stix has some major functionality issues.

The Stix 200 is compatible with 2D games on the PC (the Stix 400 version handles 2D and 3D). The white color, shape, and trigger underneath are dead ringers for the Wii's controller. On top of the Stix 200 are a plastic faceplate (with touch-sensitive buttons) and a ring that can be mapped to different keyboard commands; the tip of the Stix controller has a motion

sensor that controls onscreen cursor movement (in conjunction with a sensor on the base station that gets connected to your PC via USB). The base station can support a pair of controllers for two-player gaming.

We immediately noticed that accuracy was a huge issue for the Stix 200 controller. In games that required speed



and accuracy—shooting games, for example—the Stix 200 was nearly impossible to use. The cursor moves so slowly when you aim the controller at the screen that it's all but impossible to hit a moving target, and moving closer or farther away from the Stix's base station makes no difference. We were also disappointed at how short the base station's USB cable was.

The Stix 200 system is reasonably priced, but its accuracy and performance issues make it hard to recommend. Gamers waiting for Wii-like PC controls that actually work should hold out for future versions of the Stix. —Shane McGlaun



PROS Wii-like motion control on the PC is a first; programmable buttons; two controllers can be used simultaneously; affordable

CONS Lacks accuracy, speed; USB cable much too short

GoLive2, 888-964-6548
www.golive2.com

Direct Price \$49.99 (starter pack);
\$24.99 (additional controller)

C For more: computershopper.com/peripherals

LeapFrog Leapster2

Portable gaming console balances fun and learning

THE LEAPSTER2 is the latest handheld learning system from LeapFrog. This cute, portable player features a small touch screen with a stylus and is compatible with games for older Leapster models. The new version lets you keep tabs on your child's learning and download bonus content and online games.

You can follow your kid's progress through the console's Learning Path software by connecting the Leapster2 to your PC via USB port or SD card. (The console is designed for youngsters between 4 and 8 years old; the company offers the more advanced but similar Didj handheld for 6- to 10-year-olds.) Learning Path displays how much time he or she spent on each game, the percentage of correct answers, and other statistics. Your child's art, created in Leapster2's drawing applications, can be uploaded to the Web, where users can also print reward certificates for in-game ac-



complishments; LeapFrog promises downloadable games will be available soon.

The biggest challenge, of course, is getting today's wired kids to play simple 2D games like Star Wars: Jedi Math when they can be playing flashier games like Lego Star Wars on the Nintendo DS and PlayStation Portable. The somewhat retro and repetitive game designs of the Leapster2 aren't as engaging as what kids see on entertainment consoles; LeapFrog needs to do better than "shoot the numbers" if it wants its target audience to prefer learning games over mindless fun.

On its own, the Leapster2 hardware isn't going to grab a kid who has tried a portable gaming system, but the Learning Path software's success reinforcement—and parents who interactively engage their kids in learning reading, math, and other skills—can make it a fun learning tool. —Denny Atkin



PROS Learning Path software lets you track a child's progress; compatible with older Leapster games; good selection of learning games based on appealing licensed properties; inexpensive

CONS Graphics, gameplay not competitive with handheld entertainment systems

LeapFrog
www.leapfrog.com

Direct Price \$69.99



AMD PHENOM™ X4 QUAD-CORE

THE POWER OF QUAD-CORE
WITHIN YOUR REACH.

The AMD Phenom quad-core processor
is the world's most advanced desktop PC processor!



IBUYPOWER recommends
Windows Vista™ Home Premium

GAMER MAGE 555

ASUS® NVIDIA® 750a SLI™ Chipset Dual PCI Express Motherboard
GENUINE Windows® Vista™ Home Premium
Silent & Overclocking Proof CPU Cooling System
Athenatech® Medusa Gaming Case + 500W Power Supply
Corsair 2GB DDR2-800 Memory
500GB SATA II 7200RPM Hard Drive
Integrated NVIDIA® GeForce™ 8 Series 512MB Video (max.)
LG® 20x Double Layer DVD±RW Drive, LG® 16x DVD-ROM Drive
8 Channel Surround 3D Premium Sound
GB Ethernet LAN
600 Watt Surround Sound Speakers
Logitech Deluxe Keyboard & Optical Mouse
Free Wireless 802.11g 54Mbps Network Adapter
Add ViewSonic® 20" Wide VG2030WM TFT LCD Monitor @ \$284

AMD Phenom™ Quad-Core Processor	
9950+	\$719
9850+	\$689
9550+	\$644
AMD Athlon™ 64 X2 dual-core Processor	
6000+	\$599
5400+	\$584
5000+	\$564

\$564

GAMER MAGE 400 - ULTRA

MSI K9A2 CF-F AMD 790X CrossFire Dual PCI Express Motherboard
GENUINE Windows® Vista™ Home Premium
Thermaltake Armor+ MX Gaming Case + 800W Power Supply
Certified CPU Liquid Cooling System - Overclocking Proof
Corsair 4GB DDR2-800 Memory
1TB SATA II 7200RPM Hard Drive
ATI® Radeon™ HD 4870X2 2GB Video
LG® 20x Double Layer DVD±RW Drive, LG® 16x DVD-ROM Drive
8 Channel Surround 3D Premium Sound
600Watt Surround Sound Speakers
GB Ethernet LAN
Logitech Deluxe Keyboard & Optical Mouse
Free Wireless 802.11g 54Mbps Network Adapter

AMD Phenom™ Quad-Core Processor	
9950+	\$1509
9850+	\$1474
9550+	\$1429
AMD Athlon™ 64 X2 dual-core Processor	
6000+	\$1389
5400+	\$1369
5000+	\$1354

\$1354

GAMER MAGE 760

ASUS® NVIDIA® 750a SLI™ Chipset Dual PCI Express Motherboard
GENUINE Windows® Vista™ Home Premium
Silent & Overclocking Proof CPU Cooling System
NZXT® Hush Silent Gaming Case + 680W Power Supply
Corsair 2GB DDR2-800 Memory
500GB SATA II 7200RPM Hard Drive
NVIDIA® GeForce™ 9500GT 1GB Video
LG® 20x Double Layer DVD±RW Drive, LG® 16x DVD-ROM Drive
8 Channel Surround 3D Premium Sound
GB Ethernet LAN
600 Watt Surround Sound Speakers
Logitech Deluxe Keyboard & Optical Mouse
Free Wireless 802.11g 54Mbps Network Adapter

AMD Phenom™ Quad-Core Processor	
9950+	\$859
9850+	\$824
9550+	\$779
AMD Athlon™ 64 X2 dual-core Processor	
6000+	\$739
5400+	\$719
5000+	\$699

\$699

GAMER MAGE 550 - PRO

MSI K9A2 CF-F AMD 790X CrossFire Dual PCI Express Motherboard
GENUINE Windows® Vista™ Home Premium
Certified CPU Liquid Cooling System - Overclocking Proof
NZXT® Lexa Blackline Gaming Case + 800W Power Supply
Corsair 4GB DDR2-800 Memory
500GB SATA II 7200RPM Hard Drive
ATI® Radeon™ HD 4850 512MB Video
LG® 20x Double Layer DVD±RW Drive, LG® 16x DVD-ROM Drive
8 Channel Surround 3D Premium Sound
GB Ethernet LAN
600 Watt Surround Sound Speakers
Logitech Deluxe Keyboard & Optical Mouse
Free Wireless 802.11g 54Mbps Network Adapter

AMD Phenom™ Quad-Core Processor	
9950+	\$1034
9850+	\$1004
9550+	\$959
AMD Athlon™ 64 X2 dual-core Processor	
6000+	\$914
5400+	\$899
5000+	\$879

\$879

TOLL FREE 888.462.3899 WWW.IBUYPOWER.COM



AMD, the AMD logo, ASUS, ASUS SLI, and other trademarks are the property of their respective owners. All prices are subject to change without notice or obligation.

GAMER PALADIN 515-SLI™



ASUS® 750i SLI™ Chipset Dual PCI Express Motherboard
GENUINE Windows® Vista™ Home Premium
 Silent & Overclocking Proof CPU Cooling System
 AtheneTech® Medusa Gaming Case + 550W SLI™-Certified Power Supply
 Corsair 2GB DDR2-800 Memory
 320GB SATA II 7200RPM Hard Drive
 2X NVIDIA® GeForce™ 9500GT 512MB Video Card-SLI™ Enabled
 LG® 20x Double Layer DVD±RW Drive, LG® 16x DVD-ROM Drive
 Surround 3D Premium Sound
 GB Ethernet LAN
 600 Watt Surround Sound Speakers
 Logitech Deluxe Keyboard & Optical Mouse
 Free Wireless 802.11g 54Mbps Network Adapter
 Add ViewSonic® 20" Wide VG2030WM TFT LCD Monitor @ \$284

Intel® Core™2 Duo Processor E7200	\$774
Intel® Core™2 Duo Processor E8400	\$829
Intel® Core™2 Duo Processor E8600	\$944
Intel® Core™2 Quad-core Processor Q6600	\$849
Intel® Core™2 Quad-core Processor Q9400	\$944
Intel® Core™2 Quad-core Processor Q9550	\$994
Intel® Core™2 Quad-core Processor Q9650	\$1229

\$774

GAMER PALADIN 625-SLI™



ASUS® 750i SLI™ Chipset Dual PCI Express Motherboard
GENUINE Windows® Vista™ Home Premium
 Certified CPU Liquid Cooling System - Overclocking Proof
 NZXT® Lexa Blackline Case + 800W SLI™-Certified Power Supply
 Corsair 2GB DDR2-800 Memory
 500GB SATA II 7200RPM Hard Drive
 2X NVIDIA® GeForce™ 9600GT 512MB Video Card-SLI™ Enabled
 LG® 20x Double Layer DVD±RW Drive, LG® 16x DVD-ROM Drive
 Surround 3D Premium Sound
 GB Ethernet LAN
 600 Watt Surround Sound Speakers
 Logitech Deluxe Keyboard & Optical Mouse
 Free Wireless 802.11g 54Mbps Network Adapter

Intel® Core™2 Duo Processor E7200	\$1009
Intel® Core™2 Duo Processor E8400	\$1064
Intel® Core™2 Duo Processor E8600	\$1174
Intel® Core™2 Quad-core Processor Q6600	\$1084
Intel® Core™2 Quad-core Processor Q9400	\$1174
Intel® Core™2 Quad-core Processor Q9550	\$1224
Intel® Core™2 Quad-core Processor Q9650	\$1459

\$1009

GAMER PALADIN 885MX™



ASUS® 750i SLI™ Chipset Dual PCI Express Motherboard
GENUINE Windows® Vista™ Home Premium
 Certified CPU Liquid Cooling System - Overclocking Proof
 NZXT® Tempest Gaming Case + 800W SLI™-Certified Power Supply
 Corsair 4GB DDR2-800 Memory
 750GB SATA II 7200RPM Hard Drive
 NVIDIA® GeForce™ 9800GT+ 512MB Video Card
 LG® 20x Double Layer DVD±RW Drive, LG® 16x DVD-ROM Drive
 Surround 3D Premium Sound
 GB Ethernet LAN
 Logitech Deluxe Keyboard & Optical Mouse
 Free Wireless 802.11g 54Mbps Network Adapter

Intel® Core™2 Duo Processor E7200	\$1094
Intel® Core™2 Duo Processor E8400	\$1149
Intel® Core™2 Duo Processor E8600	\$1259
Intel® Core™2 Quad-core Processor Q6600	\$1169
Intel® Core™2 Quad-core Processor Q9400	\$1259
Intel® Core™2 Quad-core Processor Q9550	\$1309
Intel® Core™2 Quad-core Processor Q9650	\$1549

\$1094

GAMER PALADIN 918ZM™



ASUS® P5Q3 Intel® P45 Chipset DDR3 Motherboard
GENUINE Windows® Vista™ Home Premium
 Certified CPU Liquid Cooling System - Overclocking Proof
 Thermaltake Kazer-VI MX Gaming Case + 800W SLI™-Certified Power Supply
 OCZ 4GB DDR3-1333 Gold Memory
 1000GB (1TB) SATA II 7200RPM Hard Drive
 NVIDIA® GeForce™ GTX-280 1GB Video Card
 LG® 20x Double Layer DVD±RW Drive, LG® 16x DVD-ROM Drive
 Surround 3D Premium Sound
 GB Ethernet LAN
 Logitech Deluxe Keyboard & Optical Mouse
 Free Wireless 802.11g 54Mbps Network Adapter

Intel® Core™2 Duo Processor E8400	\$1579
Intel® Core™2 Duo Processor E8600	\$1689
Intel® Core™2 Quad-core Processor Q6600	\$1594
Intel® Core™2 Quad-core Processor Q8200	\$1634
Intel® Core™2 Quad-core Processor Q9400	\$1689
Intel® Core™2 Quad-core Processor Q9550	\$1739
Intel® Core™2 Quad-core Processor Q9650	\$1974
Intel® Core™2 Extreme Quad-core Processor QX9650	\$2469

\$1579

Color Options ☐ ☐

LX: 795



- 17" Wide Screen 16:10 WSXGA TFT LCD 1680x1050 Display
- **GENUINE Windows® Vista™ Home Premium**
- Intel® Core™2 Duo Processor
- Intel® Core™2 Duo Processor
- Intel® PM45 Chipset
- Intel® WiFi Link 5300 Wireless Network
- NVIDIA® Mobile GeForce™ 9600GT 512MB video
- 4GB DDR2-800 Memory
- 250GB 5400RPM S-ATA Hard Drive
- Removable 8x DVD±R/±RW Drive
- Built-in 2.0 Mega Pixels CMOS Camera

- Gb Ethernet LAN & 56K Modem
- 3x USB 2.0 Ports, 1x HDMI Port
- 1x Firewire IEEE1394 Ports
- 4-in-1 Built-in Media Card Reader
- Free Deluxe Carrying Case

Intel® Core™2 Duo Processor (800MHz FSB)	
P6400 (3MB 2Cache, 2.26GHz)	\$1334
P6600 (3MB 2Cache, 2.40GHz)	\$1379
T9400 (6MB 3Cache, 2.53GHz)	\$1459
T9600 (6MB 3Cache, 2.80GHz)	\$1579

\$1334

TOLL FREE 888.462.3899

Intel, the Intel logo, Intel Core and Core Inside are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

More Fun While You Get More Done



IBUYPOWER recommends Windows Vista™ Home Premium



- 15.4" Wide Screen WXGA TFT LCD
1280x800 Display
- **GENUINE Windows® Vista™ Home Premium**
- Intel® Centrino™ 2 Mobile Processor Technology
- Intel® Core™ 2 Duo Processor
- Intel® PM45 Chipset
- Intel® WiFi Link 5300 Wireless 802.11 a/b/g/n
- NVIDIA® Mobile GeForce™ 9600GT 512MB video
- 4GB DDR2-660 Memory
- 250 GB SATA Hard Drive
- Removable 8x DVD±R/RW Drive
- Built-in 2.0 Mega Pixels Digital Camera

- Gb Ethernet LAN & 56K Modem
- 3x USB 2.0 Ports
- 1x HDMI Port
- 3-in-1 Build-in Media Card Reader
- Free Deluxe Carrying Case

Intel® Core™ 2 Duo Processor
(1060MHz FSB)

P8400 (3MB L2Cache, 2.26GHz)	\$1124
P8600 (3MB L2Cache, 2.40GHz)	\$1169
T9400 (6MB L2Cache, 2.33GHz)	\$1249
T9600 (6MB L2Cache, 2.80GHz)	\$1479

\$1124

WWW.IBUYPOWER.COM

NVIDIA, nForce, SLI are trademarks or registered trademarks of NVIDIA Corporation or its subsidiaries in the United States and other countries.

IBUYPOWER

Sony Vegas Movie Studio 9.0 Platinum Edition

Video editor hits the jackpot for power and usability

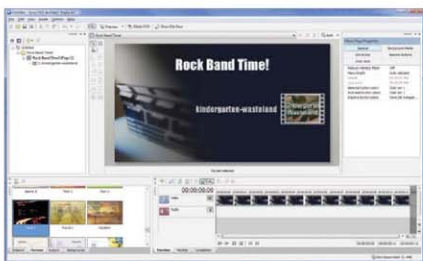


VEGAS MOVIE STUDIO is the consumer version of Sony Creative Software's highly regarded Vegas professional video-editing application. Missing are several advanced features—including the ability to use more than two video tracks, and support for high-end editing decks—but most consumers aren't likely to notice. And though the program's professional roots meant it hasn't been as consumer-friendly as its competitors, this edition's automation and help system make it a truly easy-to-use consumer video-editing application.

The Vegas series has always sat in the middle of the usability scale. Vegas's interface—unlike that of arcane professional products such as Adobe Premiere—is fairly straightforward and efficient, but in previous versions you were dropped onto a blank timeline, with no interactive guidance on how to proceed. (Imagine being handed a blank Word document and being told to create a catalog.) This time, Sony's innovative "Show Me How" interactive tutorials offer guided help, not only explaining the steps but highlighting them in the user

interface and guiding you through processes like adding audio effects, creating titles, making a slide show, and creating video crossfades.

Vegas Movie Studio 9.0 also adds new project import and export wizards that make it easier to bring in video from a variety of tape-based and digital devices. The "Import AVCHD Camcorder" wizard, however, was unable to import AVCHD files from a Canon



tro over your design layout, however, and it features the same "Show Me How" interactive help system to help you move past the basic features.

The Platinum Edition includes Cinescore Studio, which will generate royalty-free music timed to fill a selected segment of your video. The resulting music doesn't sound bad—think dance-club beats—and is great for adding a bit of mood to your video. Plus, the RIAA won't get on your case like they might for using that 30-second clip of "Don't Worry, Be Happy" in your uploaded video.

At first, Vegas 9.0's steep learning curve may push you toward the interactive tutorials, but once you're up to speed, the timeline interface helps you work more quickly and efficiently than the more-regimented wizard setups in some other consumer programs. Vegas Movie Studio supports a wide variety of input and output formats, in both HD and SD, and it makes it easy to create professional-looking videos with titles, video overlays, voice tracks, musical scores, sound effects, and transitions.

Performance is excellent. Vegas took full advantage of all four cores when rendering video on our quad-core test PC. Stability is also excellent—there were no crashes, lockups, or aborted renders. The only glitch we encountered was the aforementioned problem with importing AVCHD video from a Canon camcorder; it seems that the AVCHD standard is still coming together, as we've seen similar problems with most other editors.

Two other editions of Vegas Movie Studio are also available. The basic \$69.95 non-Platinum edition lacks support for Blu-ray, 5.1 surround, and HD; consider buying it only if you never plan to upgrade to HD. The \$129.95 Platinum Pro Pack adds the Sound Forge Audio Studio 9 sound editor, additional Cinescore themes, and more transitions and effects. Sony also offers electronic editions of the programs for \$15 less.

With its new handholding interactive help, Vegas Movie Studio 9.0 Platinum Edition has moved to the front of the pack for amateur video editors who want an accessible program that will let their projects grow in sophistication. —Denny Atkins

EDITORS' RATING 9.0

0 BETTER >>> 10

PROS Extremely powerful editing tools; new interactive tutorials decrease learning curve; excellent support for YouTube authoring

CONS Problems importing AVCHD from some devices

Sony Creative Software
800-577-6642
www.sonycreativesoftware.com

Direct Price \$99.95 (boxed)
\$84.95 (download)

Vixia HF100 HD camcorder; we had to drag the video files over to the Project Media window manually. Expert users can choose specific bit rates, resolutions, and codecs for their projects, while more casual videographers can use the Make Movie wizard and choose hard drive file, Blu-ray/DVD/CD disc, Web upload, camera, or e-mail options. Vegas Movie Studio 9.0 can also upload files directly to YouTube (in both classic "fuzzy" format and much-better-looking AVC format) or to Sony's AcidPlanet site; and it can also send them directly to a connected PlayStation Portable.

When you create a DVD, Blu-ray disc, or Video CD, Vegas Movie Studio 9.0 can automatically send the project to the bundled DVD Architect Studio application. Like Vegas Movie Studio, DVD Architect Studio is easy to use, with a wide selection of pre-built DVD themes. It also offers you complete con-

For more: computershopper.com/software

Corel VideoStudio Pro X2

Easy video editor supports formats galore

AFTER PURCHASING SOFTWARE developer Ulead, Corel released the latest version of that company's marquee video-editing software. With an even more extensive feature set than earlier versions and a less-restrictive user interface, Corel VideoStudio Pro X2 is surprisingly powerful.

Although it's not as flexible as some other video-editing programs, it is aimed at all experience levels. Beginners can simply drop clips onto a filmstrip and place transitions between them, or use the Movie Wizard to automatically create short films with themes like sports, family, and travel. More-experienced users can use the timeline view to manage title tracks, two video tracks, and a pair of audio overlay tracks. The

interface elements are now resizable, letting you get a better view of the timeline or sample effects while you're creating your project.

VideoStudio Pro X2 now has better format support, including improved AVCHD compatibility and support for the BDMV files created by Blu-ray camcorders; the output presets support a wide variety of formats



and devices, from iPods and PSPs to mobile phones, Pocket PCs, and Microsoft's Zune player. You can burn Blu-ray discs, or you can save shorter HD clips to much cheaper DVDs and play them on Blu-ray players that support AVCHD DVDs. You can also upload video directly to your YouTube page, though VideoStudio supports only the fuzzy YouTube FLV format, rather than the higher-quality AVC format offered as an option by Vegas Movie Studio.

In our tests, VideoStudio utilized all four cores on our quad-core test system when encoding video, halving the rendering time of a dual-core setup. VideoStudio is also smart about not re-rendering segments that are already in suitable format for the final project, further speeding up video encoding. —Denny Atkin

EDITORS' RATING 8.2

0 BETTER >> 10

PROS Easy-to-use interface; renders to a variety of formats; fast

CONS Lacks the flexibility, advanced features of some of its competitors

Corel, 877-582-6735
www.corel.com

Direct Price \$99.99

C For more: computershipper.com/software

System Mechanic 8

Strong utility suite merely stays the course

SYSTEM MECHANIC 8 IS among the most full-featured PC utilities available, delivering PC analysis and cleanup tools, spyware protection, file wiping, and much more. Although there isn't enough new in the \$49.95 version 8 to justify an upgrade from version 7, there's plenty here for users of older versions or newcomers looking to speed up and de-gunk their PCs.

The biggest new feature is DriveSense, a hard drive monitor tool that shows details such as temperature, spin-up time, recalibration retries, and write-error rate. The AI Registry defragmentation tool now analyzes the degree of fragmentation, so optimization and compacting don't automatically occur at low levels. ActiveCare, which automates problem-solving tasks when you're no longer at your computer, takes a little less RAM to do so, and now it comes with a few more startup options based on battery power usage (for laptops), full-screen



mode for video, and a few other tweaks. As far as improvements, that's about it.

Newcomers will still find a lot to like in System Mechanic. It has a fine collection of hard disk utilities, it lets you safely repair your system Registry, it blocks and removes spyware and other junk files, and it

even handles RAM defragmentation.

System Mechanic's System Configuration tools also let you manage startup executables with ease, and the NetBooster tool can make the most of your Internet connection speed.

While the help system remains good, some old problems remain: The program is still troubled by mistaken system analyses and false positives with what should be familiar programs, and System Mechanic doesn't let you selectively remove a given program alert; you can only disable all alerts relating to an entire group. —Barry Brenesal

EDITORS' RATING 6.7

0 BETTER >> 10

PROS Comprehensive utility suite; effective automation options; good help system

CONS Very few changes from previous version; disk defrag component now outclassed by others; no way to turn off individual item alerts

Iolo Technologies, 877-239-4656
www.iolo.com

Direct Price \$49.95



BAMBOO™

Bring your business ideas to life by marking up digital documents, making quick sketches, handwriting notes, and signing your name — all digitally, all on your computer.

Bamboo works on either Mac or PC, allowing you to take advantage of new pen-specific features in software like Microsoft® Vista in combination with Office 2007 or Mac Inkwell. Using a pen is intuitive and natural, making it easy to personalize your communications.

- ➡ Mark up or annotate
- ➡ Handwrite notes and email
- ➡ Sketch out an idea
- ➡ Navigate with the flick of the pen

make your mark

www.BambooPenTablet.com



wacom

amazon.com

DEW

LOWE'S

WAL-ART

MacMall

newegg

PCConnection

PCWorld



- AMD Phenom™ processors offer multi-core performance for life-like gaming, crystal-clear digital media and serious multitasking.



\$ 849

XG ACTION 6000

AMD Turion™ X2 Mobile Technology TL-60

Genuine Windows Vista™ Home Premium

AMD Turion™ X2 Mobile Technology

- AMD PowerNow! Technology
- HyperTransport Technology
- Enhanced Virus Protection Technology
- 15.4" WXGA Wide-Screen TFT Display 1280x800 Pixels
- Corsair® 2048MB DDR-2 667 Dual Channel
- 160GB 5400RPM SATA Notebook Drive
- ATI Radeon™ HD2600 Gt 512MB Video
- 8X DVD+-RW Drive
- 802.11G 54Mbps Wireless Network 10/100 NIC and 56K V.92 Modem
- 6 Custom Colors to Choose from
- 1 Year Limited Warranty
- + Lifetime Toll Free 24/7 Techsupport
- Free 4GB Pen Drive

FREE SHIPPING

Configure your Dream System at Xtreme Gear Today!

XG Xion 9000

AMD Phenom™ X4 9550+ Processor Black Edition

Genuine Windows Vista™ Home Premium 64 Bit Edition

- AMD 790GX Dual 16X PCI-E Mainboard Supporting CrossFire™
- Xtreme Gear Liquid Cooling System
- Corsair® 4096MB PC6400 DDR-2 800 Dual Channel 1TB (2X500GB) SATA II 3.0 7200RPM 16mb HD
- ATI Radeon™ HD 4870X2 w/ 2GB Video Memory
- 2X DVD+-RW with Lightscribe Technology
- 16X DVD ROM Drive
- 71 nForce® 3D Audio
- Logitech 5.1 Subwoofer Speakers
- Gigabit Network Card
- PCI 802.11G 54 Mbps Wireless Network Card
- Antec Nine Hundred Tower Case 680Watt Power
- 1 Year Limited Warranty
- + Lifetime Toll Free 24/7 Techsupport
- Free 4GB Pen Drive

\$ 1499

XG Xion 4000

AMD Athlon™ X2 6000+ Processor

Genuine Windows Vista™ Home Premium

- NVIDIA® nForce™ 750A SLI™ Dual 16X PCI-E Mainboard
- Corsair® 2048MB PC6400 DDR-2 800 Dual Channel 500GB SATA II 3.0 7200RPM 16mb Cache HD
- NVIDIA® GeForce® 9500 GT 1GB 16X Video
- 20X DVD+-RW Drive
- 16X DVD ROM Drive
- NVIDIA® 71 nForce® 3D Audio
- Logitech Stereo Speakers
- Gigabit Network Card
- PCI 802.11G 54 Mbps Wireless Network Card
- Turbo X Cruiser Case 420Watt with See Through Windows
- 1 Year Limited Warranty
- + Lifetime Toll Free 24/7 Techsupport
- Free 4GB Pen Drive

\$ 669

XG Xion 7000

AMD Phenom™ X4 9550+ Processor

Genuine Windows Vista™ Home Premium

- NVIDIA® nForce™ 750A SLI™ Dual 16X PCI-E Mainboard
- Corsair® 2048MB PC6400 DDR-2 800 Dual Channel 500GB SATA II 3.0 7200RPM 16mb Cache HD
- NVIDIA® 9800 GTX+ 512MB DDR3 16X PCI-E Video
- 20X DVD+-RW Drive
- 16X DVD ROM Drive
- NVIDIA® 71 nForce® 3D Audio
- Logitech Stereo Speakers
- Gigabit Network Card
- PCI 802.11G 54 Mbps Wireless Network Card
- Antec Nine Hundred Tower Case 580Watt Power
- 1 Year Limited Warranty
- + Lifetime Toll Free 24/7 Techsupport
- Free 4GB Pen Drive

\$ 889

XG Xion 3000

AMD Athlon™ X2 5000+ Processor

Genuine Windows Vista™ Home Premium

- NVIDIA® nForce™ 750 SLI™ Dual 16X PCI-E Mainboard
- Corsair® 2048MB PC6400 DDR-2 800 Dual Channel 500GB SATA II 3.0 7200RPM 16mb Cache HD
- NVIDIA® GeForce® 9400 GT 512MB 16X Video in SLI™ Mode
- 20X DVD+-RW Drive
- 16X DVD ROM Drive
- NVIDIA® 71 nForce® 3D Audio
- Logitech Stereo Speakers
- Gigabit Network Card
- PCI 802.11G 54 Mbps Wireless Network Card
- Xion II Mid-Tower Case 420Watt Power
- 1 Year Limited Warranty
- + Lifetime Toll Free 24/7 Techsupport
- Free 4GB Pen Drive

\$ 565



TOLL FREE 1-888-937-5580 WWW.BUYXG.COM

TOP 5 GAMING DESKTOPS

GO FOR BROKE WITH THESE UNSTOPPABLE POWERHOUSES.

1 2 3 4 5

Cyberpower Gamer Infinity SLI 8800
www.cyberpowerpc.com
\$2,979 (as tested)
Editors' Rating: **6.8** ✓

Specs

- Overclocked 3.8GHz Core 2 Extreme QX9650
- 4GB DDR2 memory
- Two 150GB hard drives (RAID Level 0); one 500GB hard drive
- Double-layer DVD±RW; 16x DVD-ROM
- Dual Nvidia GeForce 8800 GT graphics cards (512MB, SLI)
- 22-inch LCD
- Three-year warranty

Bottom Line

You almost always get what you pay for—especially when you pay a lot. But for evidence to the contrary, you need only look to Cyberpower's Gamer Infinity SLI 8800, an astonishing example of a speed-demon desktop at a reasonable price.

HP Blackbird 002 with Voodoo DNA*
www.hp.com
\$4,804 (as tested)
Editors' Rating: **6.5** ✓

Specs

- 3.2GHz Core 2 Extreme QX9770
- 2GB DDR2 memory
- 160GB hard drive; 320GB hard drive
- Two double-layer DVD±RW
- Nvidia GeForce 9800 GT (512MB) graphics card
- One-year warranty

Bottom Line

Though it's loaded with top-of-the-line components primed to supercharge your PC gaming, it's the Blackbird's unique design—sexy on the outside, but highly functional and accessible inside—that makes this desktop something to treasure.

iBuypower Gamer Paladin 795-CX*
www.ibuypower.com
\$2,985 (as tested)
Editors' Rating: **6.5**

Specs

- Overclocked 3.6GHz Core 2 Extreme QX9650
- 2GB DDR2 memory
- 160GB hard drive; 750GB hard drive
- Blu-ray/DVD DVD dual-read combo; DVD±RW
- Dual ATI Radeon HD 3870 X2 (512MB, CrossFireX) graphics cards
- One-year warranty

Bottom Line

You won't have to shell out an absurd amount of cash to get outstanding frame rates on your favorite games with the iBuypower Gamer Paladin 795-CX. Value-conscious components blended with all-out style make it a great choice for gamers who want to blast off right away.

ABS Ultimate X Magnum Extreme*
www.abs.com
\$5,899 (as tested)
Editors' Rating: **6.4**

Specs

- Overclocked 4GHz Core 2 Extreme QX9650
- 4GB DDR3 memory
- Two 150GB hard drives (RAID Level 0); one 750GB hard drive
- Two double-layer DVD±RW
- Dual ATI Radeon HD 3870 X2 (512MB, CrossFireX) graphics cards
- One-year warranty

Bottom Line

It may not be cheap, but the ABS Ultimate X Magnum Extreme is designed for the long haul. Its scorching processor and 4GB of bleeding-edge DDR3 RAM will keep you well positioned both for today's games and titles yet to come.

Alienware Area-51 7500
www.alienware.com
\$1,499 (as tested)
Editors' Rating: **6.2**

Specs

- 2.66GHz Core 2 Duo E8200
- 2GB DDR2 memory
- 250GB hard drive
- Double-layer DVD±RW
- Two Nvidia GeForce 8800 GT graphics cards (512MB, SLI)
- One-year warranty

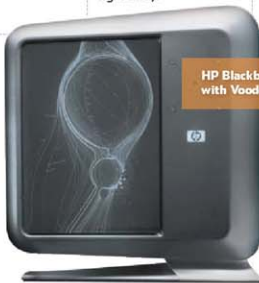
Bottom Line

Alienware has built its name on hard-core gaming computers at prices only die-hards could love. But the Area-51 7500's slightly more judicious component choices prove the company can also produce systems for mainstream gamers with more modest bank accounts.

Alienware Area-51 7500



HP Blackbird 002 with Voodoo DNA



iBuypower Gamer Paladin 795-CX



✓ = Editors' Choice

* = Configuration changed from original review

For more: computershopper.com/top-products

TOP 5 PERFORMANCE GRAPHICS CARDS

TAKE YOUR PC'S VISUALS TO THE MAX WITH THESE POWERHOUSE BOARDS.

1 2 3 4 5

Asus ENGTX280

www.asus.com
\$499.99
Editors' Rating: **9.4** ✓

Specs

- 1GB DDR3 memory
- 3-Way SLI support
- Two DVI ports, component-video/S-Video connector

Bottom Line

Offering a serious performance jump over previous generations of GeForce boards, the ENGTX280, based on Nvidia's GeForce GTX 280 GPU, is a no-compromise, excellent graphics card for running games at the highest resolutions.

Sapphire Radeon HD 4870

www.sapphiretech.com
\$299.99
Editors' Rating: **9.3** ✓

Specs

- 512MB DDR5 memory
- ATI CrossFireX support
- Two DVI ports, component-video/S-Video connector

Bottom Line

The Radeon HD 4870 delivers groundbreaking performance at the highest settings. It's an amazing value for serious gamers with larger monitors who don't want to spend hundreds more on a board.

EVGA e-GeForce 8800 GTS 512MB

www.evga.com
\$299.99
Editors' Rating: **9.0** ✓

Specs

- 512MB DDR3 memory
- Dual-card SLI support
- Two DVI ports, component-video/S-Video connector

Bottom Line

Optimized for HD video playback, the e-GeForce 8800 GTS 512MB is also a superb 3D-graphics booster. It's an excellent choice if you're looking for a quiet, fast card.

EVGA e-GeForce 9800 GTX

www.evga.com
\$390.99
Editors' Rating: **9.0** ✓

Specs

- 512MB DDR3 memory
- 3-Way SLI support
- Two DVI ports, component-video/S-Video connector

Bottom Line

The e-GeForce 9800 GTX is easy to use in a multiple-monitor setup, has low power requirements, and delivers some of the best performance among single-GPU cards out there.

Asus EN9800GX2

www.asus.com
\$599
Editors' Rating: **8.8** ✓

Specs

- 1GB DDR3
- Quad-SLI support
- Two DVI ports, HDMI port

Bottom Line

The EN9800GX2 is a clear winner if you're looking for a single graphics card that will deliver great performance on a single-monitor system. Its HDMI port also makes it ideal for HD media users.



Asus
ENGTX280



Sapphire Radeon
HD 4870



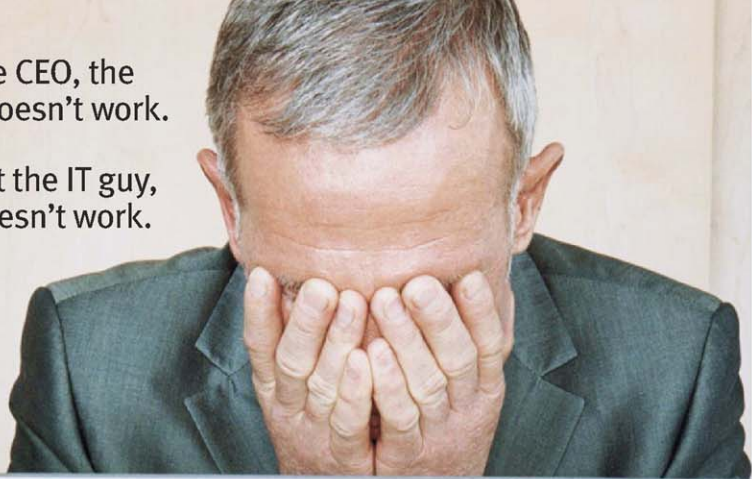
EVGA e-GeForce
9800 GTX

✓ = Editors' Choice

For more: computershopper.com/top-products

Without the CEO, the
company doesn't work.

But without the IT guy,
the CEO doesn't work.



You don't have to be the CEO to be the most important guy at the company. In today's technology-based world, a good IT guy is as important as anyone. And when you earn your IT degree — *entirely online* — from Kaplan University, you could be that guy.

VISIT OUR WEBSITE OR CALL FOR
A NO-OBLIGATION CONSULTATION
itundergrad.kaplan.edu
866.397.2097

Kaplan University's programs are designed to prepare graduates to pursue employment in their field of study, or in related fields. However, the University does not guarantee that graduates will be placed in any particular job or employed at all.



**KAPLAN
UNIVERSITY**

TOP 5 DVD- AND VIDEO-EDITING PROGRAMS

THESE APPS MAKE BURNING DVDS AND WORKING WITH VIDEO A SNAP.

1

Sony Vegas Pro 8
sonycreativesoftware.
com
\$599.95 (boxed ver-
sion); \$549.95 (down-
load)
Editors' Rating: **8.2**

System Requirements

- 1GHz or faster CPU
- 1GB RAM
- 200MB hard drive space
- Windows XP SP2 or Vista

Bottom Line

Vegas Pro 8 is a professional-level video-editing and DVD-creation package that emphasizes using a single, customizable program for the creation process. Real-time playback of your edits, nondestructive editing, and unlimited undo and redo make tweaking your videos a snap. Plus, dockable windows and customizable keyboard commands let you personalize the interface for your work style.

2

Ulead VideoStudio 11
www.ulead.com
\$69.99
Editors' Rating: **7.8**

System Requirements

- Pentium 4 or faster CPU
- 512MB RAM
- 1GB hard drive space
- Windows XP SP2 or Vista

Bottom Line

Thanks to its simple, step-by-step interface, Corel's Ulead VideoStudio 11 makes everything—from writing DVDs to creating a video production using multiple clips, custom soundtracks, and overlay effects—look easy. If you want to burn HD Blu-ray discs or render video into the iPod-friendly H.264 format, though, you'll have to spring for the pricier 11.5 Plus version (\$109.97).

3

Roxio Easy Media Creator 10
www.roxio.com
\$99.99
Editors' Rating: **7.7**

System Requirements

- 500MHz or faster CPU (Windows XP); 1.6GHz or faster (Windows Vista)
- 128MB RAM (XP); 512MB RAM (Vista)
- 1GB hard drive space
- Windows XP or Vista

Bottom Line

Whether you're a long-time user or a newcomer, Easy Media Creator 10 has something to offer. In addition to the software's numerous audio, video, and photo options, Roxio has rounded out its mobile-centric features, with import and export, photo editing, and ringtone creation leading the way. Only HD mavens will feel excluded by this feature-packed suite.

4

Adobe Premiere Elements 4
www.adobe.com
\$99.99
Editors' Rating: **7.6**

System Requirements

- 1.7GHz or faster CPU
- 512MB RAM (Windows XP); 1GB RAM (Windows Vista)
- 4.5GB hard drive space
- Windows XP or Vista

Bottom Line

Premiere Elements 4 is easy to use, takes full advantage of dual- and quad-core processors, and makes it relatively painless for amateur videographers to create appealing videos. It's a particularly good choice if you want to publish to YouTube or portable devices.

5

Pinnacle Studio
Version 11
www.pinnaclesys.com
\$49.99 (Version 12)
Editors' Rating: **7.5**

System Requirements

- 1.8GHz or faster CPU
- 512MB RAM
- 1GB hard drive space
- Windows XP (Service Pack 2) or Vista

Bottom Line

With Version 11, Pinnacle has improved on Studio's already-excellent user interface, included an enhanced algorithmic background-music generator, and improved the app's stability. At press time, Version 12 had just been released; it adds the Pinnacle Montage feature for more-polished multilayer videos, as well as direct uploading to YouTube.



 For more: computershopper.com/top-products

CHIEFTEC

A135 Series



CX-05SL-B

AECH

Extreme Workstation Tower

- Dimension : 640 x 205 x 522 mm (DxWxH)
- Drives : 4x5.25" + 1x3.5" FDD, 6x3.5" HDD.
- Front mounted USB+audio+e-SATA ports.
- Mainboard up to standard 12"x13" maximum.
- Accommodate 10 pcs CD onto front panel space.
- Spring added to hold HDD/FDD for anti-vibration.
- Install HDD easy and stable with Patented rails.
- Rear optional 1x120 mm fan blows inside heat out.
- Right optional 3x90mm fans to cool HDD/system.
- Left optional 2x90mm fans to cool CPU/PCI card.
- Optional changeable wheels fit by two screws.

EXTREME
DESIGN

EXTREME
FINISH

EXTREME
FEATURES



Turbo series



CG-01B-B



CG-01B-SL



600W-1020W



www.chieftec.com

Head office
TEL: 886-2-2859-4699
Fax: 886-2-2859-4698
E-mail: sales@chieftec.com

Chieftec USA
Tel: 1-510-324-8888
Fax: 1-510-324-3838
E-mail: sales@chieftec.com



ATACOM.com

DIRECTION.COM



computer central





THE PLATFORM *evolved.*



AMD's first comprehensive PC platform. Code-named "Spider," it's the PC platform—evolved. A genetically engineered species of technological harmony. From the AMD Phenom™ processor to the ATI Radeon™ 4800 Series graphics card to the AMD 7-Series Chipset, it's AMD's most comprehensive PC platform ever. Never before have platform components been designed to work together so well, to push each other so far, and to enable a computing experience so complete. It's the PC platform of the future, but it's not the future. It's here.



FORCE RECON

- AMD Phenom Quad/Athlon 64 Dual Core Processor
- AMD RD790/790FX Spider Platform Core Logic
- ATI Radeon HD 4870 X2 Graphics
- ATI Quad CrossFire Ready
- High Performance DDR2 Memory
- Vigor A.T.O.M.J.C. VGA Cooling System



DELTA FORCE

- AMD Phenom Quad/Athlon 64 Dual Core Processor
- AMD RD790X Spider Platform Core Logic
- ATI Radeon HD 4870/4850 OC Graphics
- High Performance DDR2 Memory
- Vigor A.T.O.M.J.C. VGA Cooling System

BUILD YOUR OWN KILLER RIG @ WWW.VIGORGAMING.COM

VISIT US ONLINE @ WWW.VIGORGAMING.COM / TO ORDER 866.907.3536

©2004, 2005 Vigor Gaming, Inc. and Alien Computer. All rights reserved. All trademarks and product names are trademarks or registered trademarks of their respective companies. All prices and configurations are subject to change without notice or obligation. Original shipping charges and services are an additional fee. Hardware shown for informational purposes only. System components may include some components and/or accessories which are not standard features. Vigor Gaming is not responsible for any typographical errors. ©2007 Advanced Micro Devices, Inc. All rights reserved. AMD, the AMD logo, AMD Phenom, ATI Radeon, and CrossFire are trademarks of Advanced Micro Devices, Inc. Other trademarks for informational purposes only and may be trademarks of their respective owners. 4036 G

AMD
smaller choice



The 100

Best in Tech

2008

Computer Shopper picks the top hardware, software, & services of the year.

By the Editors of Computer Shopper

One hundred is one loaded number. Think Franklin Delano Roosevelt: His First Hundred Days spawned the New Deal. Or Napoleon: His Hundred Days culminated with Waterloo. But *Computer Shopper's* Top 100? Ours is just plain loaded—with seriously great tech. • This time every year, *Shopper's* expert editors look back at the countless products and services that have hit the shelves, debuted on the Web, and passed through our labs, sifting for our favorites. The sheer number of options makes for a painstaking, yet thrilling, task—not to mention some spirited arguments and truly tough choices. • Some of our picks are already leaders who have made great leaps in the past year, like Google (whose Gmail, Maps, and search engine all come in tops in their categories), or Apple, which once again revolutionized tech style with the MacBook Air and the latest-generation iPhone. Others are new technologies that have just begun to evolve, like our top product of the year—read to the end to see a class of tech that's sure to have an explosive effect on the computing market for years to come. • Because these products represent the best of the best, our 100 picks can help serve as your gift guide for the tech lovers on your holiday list. But whether you're shopping or just browsing, this list will get you up to speed on the best "new deals" of the year.

BEST BUDGET PC

HP Pavilion a6560f

Gone are the days when you shelled out a few hundred bucks for a desktop and got something with also-ran performance and features. Today's inexpensive systems can come with the works, and no PC proved it better this year than HP's Pavilion a6560f (and its successor, the a6660f), which is loaded with media-friendly perks (a TV tuner, a 300GB hard drive, an HDMI out) and enough performance to handle pretty much anything but demanding 3D games.

Hewlett-Packard

www.hp.com

\$549 (base model, a6660f)

BEST MIDRANGE PC

Dell XPS 630

True, Dell aims its XPS 630 squarely at younger or budget-minded gamers; the system's sleekly angular case is even modeled closely after the company's higher-price gaming boxes. But this midrange model packs enough punch to satisfy every member of the family—and its solid graphics hardware and large hard drive mean it has the hardware

potential for the future that everyone can appreciate.

Dell • www.dell.com

\$1,149 (base model)

BEST HIGH-END PC

Vigor Colossus

Looking for the very tip of the top? We found it at Vigor in the aptly named Colossus, powered by Intel's hyper-enthusiast, dual-CPU Skulltrail platform. Predictably, it pulverized most other machines when dealing with multithreaded programs. For everyday gamers or moderate-minded power users, it's overkill, but if you need capabilities that push every envelope known to computerdom, the Colossus is your best.

Vigor Gaming Computer

www.vigorgaming.com

\$6,649 (base model)

BEST SMALL-FORM-FACTOR PC

HP Pavilion Slimline S3330f

Finding a computer to fit into the tiniest possible amount of space isn't as difficult as you might think. But finding one that offers real features and real performance is usually harder. Not this year: HP's Pavilion Slimline S3330f (and its successor, the s3530f)

proved that great machines don't always come in big, expensive packages. Its long list of entertainment must-haves include a TV tuner, Blu-ray reading support, and a roomy hard drive.

Hewlett-Packard

www.hp.com

\$499.99 (base model, s3530f)

BEST GAMING PC

Cyberpower Gamer Infinity

SLI 8800

Dollar for dollar, we saw no better-equipped gaming desktop this year than Cyberpower's Gamer Infinity SLI 8800. New parts (and prices) may have outstripped the system since its release, but its strategic blend of high-performing, low-cost components wasn't equaled by any other system that passed through our labs in 2008.

Cyberpower

www.cyberpowerpc.com

\$2,979 (base model)

BEST HOME THEATER PC

HP Pavilion Elite m9200t

HP really knows how to deck out its media machines. Few others this year came

equipped like the m9200t (and its current successor, the m9400t), which, with its hefty 750GB hard drive and built-in Blu-ray support, comes ready for full-strength TV watching and recording. But with its powerful Core 2 Quad processor, generous allotment of RAM, and gaming-caliber video card, it can tackle just about any other task with equal aplomb, too.

Hewlett-Packard

www.hp.com

\$799 (base model, m9400t)

BEST ALL-IN-ONE PC

Apple iMac

Increasingly stiff competition from just about every other major manufacturer hinted at a revolution in the all-in-one-PC market, but Apple still triumphs when it comes to packaging full systems into one-piece display-and-PC units. User-friendly convenience, style-aware appearance, and consistency of design—inside and out—remain Apple's trademarks and keep the iMac at the top of its category.

Apple • www.apple.com

\$1,199 (base model)

Dell XPS 630



Apple iMac



Best-Designed PC

HP TouchSmart IQ506

Its black lines and thoughtful curves alone would have branded it as the most sensibly stylish of the non-Apple all-in-ones.

But the inclusion of a touch screen and HP's TouchSmart software makes the TouchSmart IQ506 a fully considered experience that sets a new standard for the way living-room PCs will look in the year—and years—to come.

Hewlett-Packard • www.hp.com • \$1,499 (base model)



Desktops

THESE EIGHT SYSTEMS DEFINE PC PERFECTION.

Notebooks

LEAN, LUXURIOUS, AND LITTLE: THESE PORTABLES CAN DO IT ALL.



Lenovo
ThinkPad
X300



Sony
VAIO VGN-
FZ485U/B

Best-Designed Notebook

Apple MacBook Air

Apple's theatrical premiere of the MacBook Air left many jaws on the floor, but it didn't take long for the counter-buzz to sink in. And while the criticisms of the Air were certainly valid—no wireless wide-area network (WWAN), no optical drive, lack of connectivity options—they did little to detract from the sexiness of the package. If the Lenovo ThinkPad X300 is a notebook for the serious 24/7 business user, the Air—with its 3-pound weight, 0.76-inch-thick chassis, and typical Apple design flair—was meant for the stylish Richard Bransons (and wannabes) of the world.

Apple • www.apple.com • \$1,799 (base model)



BEST MIDSIZE NOTEBOOK

Sony VAIO VGN-FZ485U/B

The Sony VGN-FZ485U/B is full-feature enough to serve as your home entertainment centerpiece, packing a Blu-ray burner, a stunning 15.4-inch screen (featuring Sony's color-boosting Xbrite-HiColor LCD technology), and 4GB of RAM. Yet its 6.1-pound weight, lean dimensions, and impressive connectivity make it a very powerful—and portable—travel companion.

Sony Electronics
www.sonystyle.com • \$2,199

BEST BUDGET NOTEBOOK

Cyberpower Xplorer X5-3400

The Cyberpower Xplorer X5-3400's design may look plain compared with glittery, gaming-friendly machines from MSI or Toshiba, but its performance is nothing to sneeze at. Based around Intel's Centrino 2 platform, the Xplorer X5-3400 did better in our benchmark tests than more expensive systems, all while keeping the cost down. Nothing about the unit's exterior will make it a showpiece, but it delivers where it counts most: performance.

Cyberpower
www.cyberpowerpc.com
\$999.99

BEST GAMING NOTEBOOK

Alienware Area-51 m15x

If money is no object, it's possible for you to track down a bigger and better gaming notebook than Alienware's Area-51 m15x. But we never saw a better overall blend of value and performance in 2008 than this 15.4-inch powerhouse, which was so loaded with choice components and configuration options that it seemed determined—and destined—to be the last laptop you'd ever need.

Alienware • www.alienware.com
\$1,499 (base model)

BEST THIN-AND-LIGHT NOTEBOOK

Lenovo ThinkPad SL400

The ThinkPad SL400 is a sturdy thin-and-light that's all business—with a few concessions toward entertainment. At less than six pounds, it has the portability most road warriors demand; its Centrino 2 platform processor will run most business applications without hiccup; and the built-in DVD burner and 14.1-inch screen can provide some distraction during downtime. We've looked at many business notebooks this year, but few models have hit all the essentials as well—and as affordably—as the SL400.

Lenovo • www.lenovo.com
\$689 (base model)

BEST ULTRAPORTABLE

Lenovo ThinkPad X300

Apple's MacBook Air may have announced that "thin is in," but it was Lenovo's ThinkPad X300 that showed you could fit a you-name-it list of features into a notebook frame less than an inch thick and still stay under four pounds. Among the X300's most desirable traits: a built-in optical drive, solid-state storage, GPS, WWAN, a gorgeous 13.3-inch screen, and a comfortable keyboard. The outside may look last century, but with so much good stuff inside, who's complaining?

Lenovo • www.lenovo.com
\$2,725 (base model)

BEST TABLET PC

Toshiba Portégé M700-S7002

The Toshiba Portégé M700-S7002 is designed for business users on the move. Its 12.1-inch matte-finish screen uses LED backlighting, and the 1,280x800 resolution makes for sharp, clear text. The digitizer—the overlay that senses the stylus used for writing and onscreen navigation—does not detract from the screen's clarity and detects input accurately. The system also has active hard drive protection, which helps prevent data loss should you drop the unit.

Toshiba America
www.toshibadirect.com • \$1,799

BEST ENTERTAINMENT NOTEBOOK

HP Pavilion HDX Penryn Edition

The HP Pavilion HDX Penryn Edition is a laptop in name only. At 15.5 pounds, it's barely transportable, but its size allows for many of its strengths: a vibrant 20.1-inch screen with a clever hinged design, a removable remote control recessed into the keyboard deck, a case big enough to fit the most-current processors, and a built-in HDTV tuner. All in all, the HDX is less a notebook than a foldable multimedia powerhouse.

Hewlett-Packard • www.hp.com
\$3,139

BEST NETBOOK

Asus Eee PC 1000 Series

Most budget ultraportables force you to sacrifice features in exchange for their considerable convenience. Not so with Asus' Eee PC 1000 series of netbooks. Offering Windows or Linux and either a conventional hard drive or solid-state storage, they're equipped with surprisingly big displays and keyboards (10 inches each) that make using them as easy as finding a place to stash them. And at less than \$700, they're perfect for budget-conscious business travelers or those seeking a computer for the morning commute.

Asustek Computer • www.asus.com • \$549 (8GB drive, Windows XP); \$699 (40GB SSD, Linux)

BEST PORTABLE HARD DRIVE

Seagate FreeAgent Go
Seagate's FreeAgent Go impressed us enough to make it the category winner last year, and it's back for an encore. This year, Seagate redesigned the Go with a sleeker, thinner exterior and offers versions for Macs (USB 2.0 and FireWire 800) and Windows (USB 2.0). Available in capacities of 250GB, 320GB, and 500GB, the drive can be paired with an optional dock that makes connecting it to a PC simple.

Seagate • www.seagate.com
\$119.99 (250GB); \$149.99 (320GB); \$239.99 (500GB)

BEST CELL PHONE

LG Vu
LG made a splash in 2008 with a variety of innovative cell phones, but center stage belongs to the Vu. The front of this slim device is covered entirely by a 3-inch touch screen, giving it a minimalist yet sexy profile. Plus, because it uses AT&T's high-speed 3G network, the Vu can access the AT&T Mobile TV service to play a variety of TV programming.

LG Electronics
www.lgusa.com
\$329.99 (with AT&T)

BEST MP3 PLAYER

Sony NWZ-S710F
Apple's range of iPods dominates the industry, making it easy to forget that iPods aren't the only MP3 players out there. Sony, once a portable-audio force with its Walkman cassette and CD play-

ers, has lost ground on the digital music front, but its latest players in the NWZ-S710F series show that the electronics giant can still innovate. Besides the standard music- and video-playback features, Sony's player one-ups the iPod with its bundled noise-canceling headphones.

Sony Electronics
www.sonystyle.com
\$129.99 to \$179.99

BEST IPOD ACCESSORY

Altec Lansing Orbit MP3
Of the countless iPod accessories on the market, many are fine products that add new functionality to Apple's players. But one of the best is Altec Lansing's Orbit MP3, an affordable portable speaker that fits easily into a bag. It won't deliver high-end sound, but its ability to give you beats anywhere you go—at a low price, too—raises it above the most expensive of iPod speakers. (It also works with other audio sources.) With a redesigned enclosure that delivers 360-degree sound, this is one accessory you'll feel good splurging on.

Altec Lansing
www.alteclansing.com • \$40

BEST PORTABLE VIDEO PLAYER

Archos 705 WiFi
Sure, most music players now do video playback, but the experience is a bit lacking on their tiny screens. That's why the Archos 705 WiFi is a prime choice if you want to watch videos on the go.

It has a large 7-inch display that's also a touch screen. It's bright and easy to read in any lighting situation, and for an even bigger view, you can also output the video to your television. And as its name implies, the device turns into an Internet tablet that lets you surf the Web via Wi-Fi.

Archos • www.archos.com
\$399.99 (80GB); \$499.99 (160GB)

BEST USB MEMORY DEVICE

SanDisk Cruzer Enterprise FIPS Edition, Kingston DataTraveler BlackBox

More folks than ever—businesspeople and home users alike—are carrying sensitive data on their computers, so the need for security has become crucial. For locked-down removable storage, we like both SanDisk's Cruzer Enterprise FIPS Edition and Kingston's DataTraveler BlackBox. Both offer government-grade, hardware-based encryption and come in a variety of memory capacities. Although they're designed with business users in mind, everyone can take advantage of them.

Kingston • www.kingston.com
\$165 to \$424
SanDisk • www.sandisk.com
\$87 to \$385

BEST HEADSET

Jabra BT8040
Bluetooth headsets are great for freeing your hands from your phone during calls, but many are plagued by poor voice

quality. The Jabra BT8040 is an exception, providing excellent audio with good noise reduction. It's also unobtrusive and comfortable to wear.

Jabra • www.jabra.com • \$99.99

BEST HEADPHONES

Audio-Technica QuietPoint ATH-ANC3

Professional audio-equipment maker Audio-Technica pulled out all stops when it designed the consumer-grade, noise-canceling QuietPoint ATH-ANC3 earbud-style headphones, and it shows. These earbud-style phones provide good audio fidelity, as well as active cancellation circuitry that you can switch on or off. (See our review on p. 44.)

Audio-Technica
www.audio-technica.com • \$169

BEST GPS DEVICE

Garmin Nuvi 880

All GPS navigation devices get you from point A to point B, but some, like Garmin's Nuvi series, simply do it better than others. The Nuvi 880 is pricey, but it's packed with features that separate it from the crowd, including text-to-speech functionality and Bluetooth. It also works with MSN Direct, which gives the unit access to other handy on-the-go info, such as traffic, news, movie listings, and fuel prices. You can even plan your trips on a PC and have the info sent wirelessly to the unit.

Garmin • www.garmin.com
\$899.99

Archos 705
WiFi



Jabra
BT8040

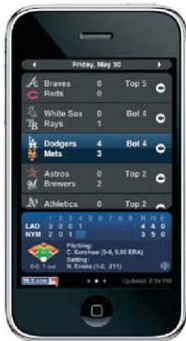


Best Smartphone

Apple iPhone 3G

Last year, the iPhone changed the game for how smartphones are created and used. The new 3G version continues to trump the competition, thanks to its killer "app": the App Store. Whether it's serving up a time-wasting game, an instant-messaging (IM) client, or a program for calculating your finances, the App Store turns the

iPhone from a souped-up cell into a mobile computer.
Apple • www.apple.com • \$199.99 (8GB) or \$299.99 (16GB), both with a two-year AT&T Wireless contract



Mobile

THESE DEVICES KEEP YOU CONNECTED, PRODUCTIVE, AND ENTERTAINED.

Hardware

PERIPHERALS AND PARTS THAT MAKE PERFECT COMPUTING COMPLEMENTS.

Best Mainstream Processor

Intel Core 2 Duo E8400

It took a while for Intel's innovative 45-nanometer manufacturing technology to descend from the pricing stratosphere, but now that it has, you can get your hands on an efficient, cool-running CPU for a very reasonable price. Intel's Core 2 Duo E8400 is a dual-core model that clocks at a dust-raising 3GHz and houses 6MB of L2 cache. It runs on a 1,333MHz front-side bus (FSB), which might preclude using it with some older motherboards, but if you have the right system support, you'll be granted some serious speed at a jolly low price.

Intel • www.intel.com • \$163



ATI Radeon HD 3850



XFX nForce 790i Ultra



BEST PERFORMANCE PROCESSOR

Intel Core 2 Extreme QX9770

Sorry AMD, maybe next year. Holding down the fort at the top end of the performance spectrum until Intel's new Nehalem chips arrive is the boundary-breaking Core 2 Extreme QX9770. Rated at a startling 3.2GHz and supporting a 1,600MHz FSB speed, this LGA775 powerhouse is every bit as imposing as it is expensive.

Intel • www.intel.com • \$1,399

BEST BUDGET GRAPHICS CARD

ATI Radeon HD 3850

Now available for around \$100, the Radeon HD 3850 delivers terrific performance at high resolutions on DirectX 9 (DX9) games, and it can handle complex DX10 games ably at medium resolutions. It's not intended for die-hard gamers, but for everyone else, it's an outstanding deal.

Advanced Micro Devices

ati.amd.com • \$100 (cards from third-party manufacturers)

BEST MAINSTREAM GRAPHICS CARD

ATI Radeon HD 4850

Truly spectacular 3D performance has seldom been priced quite as low as with the Radeon HD 4850, which brings superior graphics performance right into the mainstream price range. Its capabilities let you save on the graphics card, so you can put the money toward a larger monitor capable of showing off all the intense, high-resolution prowess this card has to offer.

Advanced Micro Devices ati.amd.com • \$175 (cards from third-party manufacturers)

BEST GAMING GRAPHICS CARD

Nvidia GeForce GTX 280

What a year for video cards! For the first time in ages, ATI and Nvidia ran consistently

neck and neck, with each new release stealing the other company's thunder, if only temporarily. ATI's dual-GPU cards make a compelling case, but we're giving the edge to Nvidia's GTX 280, a single-GPU barn-burner that offers improved power savings to accompany its killer visuals.

Nvidia • www.nvidia.com • \$420 (cards from third-party manufacturers)

BEST MOTHERBOARD

XFX nForce 790i Ultra

When you're building a system from scratch, you want it primed for the present and the future. XFX's nForce 790i Ultra definitely fits the bill, with support for a raft of crucial new technologies (1,600MHz FSB, DDR3 RAM, Enthusiast System Architecture, and 3-Way and Quad SLI) that make it a dream for serious gamers looking for the foundation for their next hot system.

XFX • www.xfxforce.com • \$350

BEST HIGH-END CASE

Cooler Master Cosmos S

Sure, it looks cool, like something straight out of a sci-fi movie. But it was its cooling that really sold us on Cooler Master's Cosmos S case, which packs eight fans and enough liquid-cooling-friendly features to chill even the hottest rigs. Mostly tool-less construction and quiet operation make this great-looking case even more attractive.

Cooler Master www.coolermaster.com • \$350

BEST COMPACT CASE

Raidmax IceCube

It might be a cliché to say that something is small on the outside but big on the inside, but with Raidmax's IceCube case, it's really true. The IceCube has a lot more room than most cases designed to accept MicroATX motherboards—enough that you can install a long video card. One caveat: There's no intake fan, so cooling could

be a problem. But if you keep your aspirations in check and take the IceCube's modest frame into account, this case will serve you well.

Raidmax • www.raidmax.com \$109.99

BEST INTERNAL HARD DRIVE

Western Digital Velociraptor
Much like its Cretaceous namesake, Western Digital's 2.5-inch hard drive (which resides in a heat sink that fits in a 3.5-inch drive bay) proves that devastating things can come in diminutive packages. Running fast and cool, and with a decent 300GB capacity, the Velociraptor may be on the expensive side, but if you have a system that runs hot, it's worth the money.

**Western Digital
www.wdc.com • \$299.99**

BEST EXTERNAL STORAGE SOLUTION

Thermaltae BlackX SE
If you're like us, you can never have enough hard drives—old or new. But if you just can't bear to wipe and toss your old internal drives, the Thermaltae BlackX SE is a clever way to give them new life. Just connect it to your PC

with a USB cable and you're ready to go. Snap in a 2.5- or 3.5-inch Serial ATA drive, and Windows will automatically recognize it, letting you work with its data. The best part? Drives are hot-swappable—you don't even have to turn off your computer first. You can't beat that for convenience.

**Thermaltae
www.thermaltae.com • \$39.99**

BEST NETWORK-ATTACHED STORAGE

HP Media Vault mv2120
Looking for a backup solution for all the PCs in your house? How about file sharing or a central storage repository? With the Media Vault mv2120, you get 500GB of hard drive space (plus a removable bay, so you can add a second drive) to handle all of the above. The compact unit sets up in a snap, and the included Media Vault software has five shared folders (documents, music, photos, videos, and backup). Plus, you can easily add new folders that are public, password-protected, or private.

**Hewlett-Packard
www.hp.com • \$299.99**

BEST PHOTO INKJET PRINTER

Canon Pixma IP2600

You can spend a lot more than \$50 on a photo inkjet printer, but that money won't necessarily get you better image quality. The Pixma IP2600 delivered impressive results in our color-reproduction tests, cranking out gorgeous 4,800x1,200-dot-per-inch (dpi) borderless images with spot-on color accuracy. The list of features it doesn't have—networking, memory-card slots, an LCD screen—may be disconcerting for power users, but we'll happily pay its street price and put the money we've saved toward a new digital camera.

**Canon U.S.A.
usa.canon.com • \$49.99**

BEST SNAPSHOT PRINTER

Epson PictureMate Zoom

When making folks squint to see your pictures on a phone or digital-camera screen just won't do, put the PictureMate Zoom to work. This lunchbox-size inkjet cranks out stunning 4x6-inch glossies or matte-finish photos in about a minute-and-a-half,

for as little as 25 cents per print. The bright 3.6-inch LCD makes it easy to preview your photos, and you can print from a PC, a PictBridge-compatible camera, a memory card, a USB thumb drive, or a Bluetooth phone (with the optional \$39 adapter). There's even a \$49.99 battery option rated for 140 prints.

**Epson America
www.epson.com • \$199.99**

BEST LASER PRINTER

Xerox Phaser 3250/DN

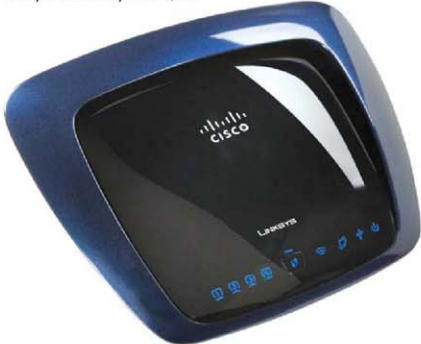
Laser Printer
The Phaser 3250/DN Laser Printer delivers the right balance of performance, print quality, and affordability for small- and home-office owners who need a personal laser printer. The 3250/DN's compact design won't eat up much desk space, and the standard input tray accepts up to 250 sheets. (An optional bottom tray ups input capacity to 500 sheets.) The "DN" denotes the presence of both a duplexer (double-sided printing saves paper) and an Ethernet port (for networkability). And, in our tests, the printer performed at close to its rated 30-page-per-minute (ppm) speed for text documents. **Xerox • www.xerox.com \$349.99**

Best Wireless Networking Device

Linksys Simultaneous Dual-N Band Wireless Router (WRT610N)

Looking to upgrade your Wi-Fi network but don't want to sacrifice speed to accommodate older devices? The WRT610N is capable of broadcasting networks at both 2.4GHz and 5GHz frequencies simultaneously. This stylish router offers easy setup and comes equipped with four Gigabit Ethernet ports, as well as a USB port for adding storage to the network. Throughput was very good in our tests, especially in the 5GHz frequency. You can certainly find less-expensive single-band Wi-Fi routers, but the flexibility and speed of the WRT610N make it worth the extra coin.

Linksys • www.linksys.com • \$149



Western Digital Velociraptor



HP Media Vault mv2120



Best Multifunction Printer

Canon Pixma MX7600

The Pixma MX7600 comes close to being the perfect all-in-one printer. This six-color inkjet uses Canon's new Pigment Reaction technology to coat the paper with clear ink, which in turn reacts with the subsequent coat of pigment ink to produce remarkable clarity and detail in text and photos. The MX7600 will also scan, copy, and fax, and it offers automatic duplexing, fast photo print speeds, and an Ethernet port for networking.

Canon U.S.A. • usa.canon.com • \$359.99



Creative
Gigaworks
T40



LaCie 324

BEST COLOR LASER PRINTER

Samsung CLP-610ND

The CLP-610ND is an attractive bargain among color laser printers. Rated at 21ppm for both monochrome and color output, the CLP-610ND is relatively fast for a color laser in this price range, and the 600x600dpi resolution engine delivered generally good print quality. The 610ND has a built-in duplexer, a 250-sheet-capacity main tray, and a multipurpose tray that holds 100 sheets; an optional third tray can handle an additional 500 sheets.

Samsung • www.samsung.com • \$399.99

BEST PC SPEAKER SYSTEM

Creative Gigaworks T40

A powerful speaker system doesn't require five speakers and a subwoofer. Case in point: the two-speaker Creative Gigaworks T40. The desktop speakers deliver room-filling sound, and the BasXPort feature helps boost the lower midrange despite

the lack of a subwoofer.

Creative Technology
www.creative.com • \$149.99

BEST INPUT DEVICE

Microsoft Explorer Mouse

In the past, Logitech has often trumped Microsoft when it comes to PC-input hardware. (Don't get us wrong—Microsoft makes some superb peripherals.) But with its Explorer Mouse and BlueTrack Technology, the Redmond giant has finally come up aces. The blue-light technology combines the precision of laser-mouse technology with the coverage area of optical, allowing it to work on nearly any surface—even carpet.

Microsoft
www.microsoft.com • \$59.95 to \$79.95

BEST BUDGET LCD

Asus VW223B

If you need a basic monitor for general computing tasks and don't care about high-definition video, the 22-inch Asus VW223B is a compelling choice. Its ability to connect

to a computer via USB makes it accessible for those who want a second display on their desktop but don't have the necessary video card. Plus, it offers plenty of performance for the price.

Asustek Computer
www.asus.com • \$289

BEST PERFORMANCE LCD

LaCie 324

Although the LaCie 324 is too pricey for casual users, this 24-inch LCD monitor is perfect (and downright affordable) for professionals who demand color accuracy. The 324 also excels at video, especially if you're working with 1080p-resolution content. With both Blu-ray and upconverted DVD video, we saw some of the best picture quality we've ever experienced on a PC display.

LaCie • www.lacie.com • \$1,000

BEST ENTERTAINMENT LCD

Samsung T220HD

LCD monitors tend to lack sex appeal, so when your company makes some of the sleekest-

looking LCD televisions in the world, why not design a computer monitor based on one of them? That's what Samsung did with the T220HD, a synthesis of a 22-inch HDTV and a computer monitor. The Touch of Color design gives the display an expensive feel, while HDMI, DVI, VGA, and component-video inputs let you connect most video sources.

Samsung
www.samsung.com • \$449

BEST WEBCAM

Logitech QuickCam Pro 9000/Vision Pro

No one came close to beating Logitech's QuickCam Pro 9000 (released in 2007) this year, except for Logitech itself. The company recently announced a Mac version based on the 9000—the QuickCam Vision Pro Webcam for Mac—that will give Mac users the same excellent video and audio quality that Windows users have been enjoying.

Logitech • www.logitech.com • \$99.99 (Pro 9000); \$129.99 (Vision Pro)

BEST BUDGET DIGITAL CAMERA

Fujifilm J10

We like Fujifilm's entry-level cameras because they mimic the style and performance of high-end point-and-shoot models while keeping prices down. The J10, from Fujifilm's new J series, is a thin, easy-to-pocket camera that offers features like a highly effective image-stabilization mode and an 8.2-megapixel sensor. **Fujifilm • www.fujifilm.com \$150**

BEST MIDRANGE DIGITAL CAMERA

Casio Exilim Pro EX-F1

At nearly \$1,000, the 6-megapixel Casio Exilim Pro EX-F1 is at the top end of the midrange-cam category. But with its amazing ability to shoot high-definition video and capture 60 full-resolution photos in a second, the EX-F1 is truly one of the most innovative cameras introduced this year. **Casio • www.casio.com \$999**

BEST DIGITAL SLR CAMERA

Canon EOS Rebel XSi
Digital single-lens-reflex

(dSLR) cameras represent the best of what camera makers can do in digital imaging. On the entry-level dSLR front, Canon's EOS Rebel XSi is a champ. It's nimble, and photo quality is excellent. It isn't as feature-rich as some of its competitors, but good-looking images are what count here. **Canon U.S.A. • usa.canon.com • \$699.99**

BEST ULTRACOMPACT CAMERA

Canon PowerShot SD790 IS

It's hard to beat Canon in the ultraportable category. The company continues to churn out great pocket cameras that take superb photos and offer new, unique features. The PowerShot SD790 IS is a slick-looking shooter with fast response times and an easy-to-use interface. Plus, its image quality is some of the best we've seen from a point-and-shoot model. **Canon U.S.A. • usa.canon.com • \$299.99**

BEST BUDGET DIGITAL CAMCORDER

Kodak Z16

YouTube's meteoric rise spawned a wave of easy-to-use pocket camcorders that shoot video you can upload

as soon as you transfer it to a computer. Kodak upped the ante with its Z16. Unlike other, similar devices, the Z16 offers expandable memory through SD cards, but it comes equipped with 128MB of internal memory. It uses rechargeable AA batteries and has a large 2.4-inch screen. Best of all, it can shoot video at up to 720p resolution. **Kodak • www.kodak.com \$179.95**

BEST MIDRANGE DIGITAL CAMCORDER

Canon FS100

If you don't require high-definition for your home videos, but want something better than what a digital camera can shoot, stick with the Canon FS100. Unlike tape-based camcorders of yore, the FS100 uses flash memory, making it easy to transfer the footage to your computer. Plus, it has a palm-friendly design that's easy to hold. **Canon U.S.A. • usa.canon.com • \$399**

BEST GAMING PERIPHERAL

Fanatec Porsche 911 Turbo Wheel

The Fanatec Porsche 911

Turbo Wheel may be a niche product targeting fans of racing games, but it's the closest you'll come to actually owning a Porsche without buying the car. It's solidly constructed, and grabbing the steering wheel in this licensed replica feels like the real thing. It works with both a PC and Sony's PlayStation 3 (PS3), and the force-feedback feel is incredible. **Fanatec • www.fanatec.com \$350**

BEST GAMING DEVICE

Sony PlayStation 3

After a lackluster launch that saw its position drop behind Microsoft's Xbox 360 and Nintendo's Wii, the PS3 found 2008 to be its year to shine. Thanks to a great mix of new games and HD DVD's defeat to Blu-ray, the PS3 is finally stepping up to the challenge posed by its console rivals. Plus, since it also doubles as a Linux-based computer, it has a special place in our hearts. **Sony Computer Entertainment America • www.playstation.com \$399.99**



Best High-Definition Camcorder

Canon Vixia HF11

The beauty of the Vixia HF11 is its storage capacity. In addition to its whopping 32GB of internal memory (almost three hours in the highest recording mode), it accepts SDHC cards for easy memory expansion. An HDMI port lets you view the recorded content directly on an HDTV, and video quality is terrific. **Canon U.S.A. • usa.canon.com • \$1,199**



Canon PowerShot SD790 IS

Software

17 WAYS TO MAKE COMPUTING EASIER—AND MORE FUN.

Best Personal-Finance Software

TurboTax Premier 2007

This year's edition of TurboTax includes greatly increased ease of use and improved information gathering among its considerable assets. Its streamlined methods for dealing with major life changes (such as selling or refinancing your home) helped cement its well-deserved reputation as the strongest and most up-to-date tax title on the market.

Intuit • turbotax.intuit.com • \$74.95



BEST OFFICE SUITE

OpenOffice.org 2.4

Microsoft was still riding on Office 2007, and Corel came out with a new WordPerfect Office Suite. But once again, we were most wowed by this free, open-source alternative, which in its latest version, added technical and usability tweaks to help it prepare for its upcoming 3.0 release. OpenOffice.org might not do everything the big boys do, but it's getting there.

OpenOffice.org
www.openoffice.org • Free

BEST HOME MEDIA SOFTWARE

Roxio Easy Media Creator 10 Suite

Although a bit weak with HD video, Easy Media Creator 10 contains a bounty of other apps and utilities for doing everything you can think of with your media. Tons of options for managing audio (such as creating mix discs and converting LPs and tapes to digital files), video (editing it, transferring it from

camcorders, or converting it to different formats), and mobile products (creating your own ringtones) make this suite a terrific way to lead a less harried digital life.

Roxio • www.roxio.com • \$99.99

BEST ANTIVIRUS SOFTWARE

Kaspersky Anti-Virus

Kaspersky might still be a dark-horse company with less name-recognition value than McAfee or Norton, but its anti-virus package is a solid product well worth investigating. Frequent updates, integrated system-restore functionality, and speedy scanning helped keep it at the front of the pack this year.

Kaspersky
www.kaspersky.com • \$59.95 (one-year subscription)

BEST UTILITY SUITE

System Suite 8 Professional

For Internet security options, you'll want to look elsewhere, but Avanquest's System Suite 8 Professional has a terrific

interface that guides you to a wealth of startup, hard drive, and Registry-tweaking tools, as well as more to help you keep your computer running smoothly.

Avanquest Software
www.avanquest.com • \$59.95

BEST FILE-COMPRESSION SOFTWARE

Stuiff 12 Deluxe

Stuiff 12 Deluxe supports almost three dozen file types, and this year's version introduced particularly powerful new compression techniques for dealing with images. True, its data-compression rates aren't spectacular, but it's quick and easy to use, with Photoshop and Microsoft Office plug-ins that make common tasks easier than ever.

Smith Micro
www.smithmicro.com • \$49.99

BEST INTERNET SECURITY SOFTWARE

Norton 360 2.0

Still our favorite "set it and forget it" security app on the

market, Norton 360 roared back for a second year with optimized components for crucial system tasks like tuning up, backing up, and defragmenting hard drives. It offers top-notch protection without requiring a top-flight time commitment.

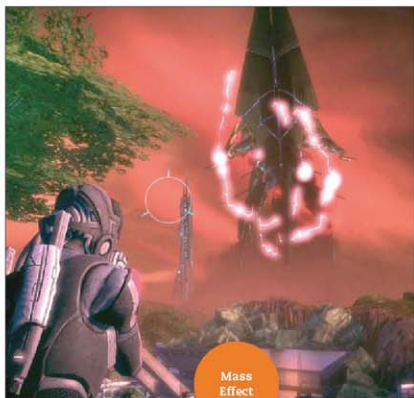
Symantec
www.symantec.com • \$79.99

BEST FIREFOX ADD-ON

Video DownloadHelper

Scouring the Web for fun, useful, or nostalgia-inducing videos is a great pastime; tearing your hair out when you try to rewatch them weeks later isn't quite as entertaining. Spare your follicles with Video DownloadHelper. Once it's installed, just go to a video page (on Facebook, Google Videos, YouTube, or another service) and click a toolbar button to download the video directly to your computer. Lots of formats are supported, so you'll have the freedom to use or watch videos however you like once you have them on your hard drive.

Mozilla • addons.mozilla.org Free



BEST ANTISPYWARE SOFTWARE

Ad-Aware 2008

Whether you're using the free or the paid version, Ad-Aware 2008 gives you some of the deepest malware scanning you can find. With a friendly interface and lots of customization, it's a great choice for novices and know-it-alls alike.

Lavasoft • www.lavasoft.com
Free; \$39.95 (pro version)

BEST DISC-BURNING SOFTWARE

Nero 8 Ultra Edition

Roxio might have an edge in terms of overall features, but Nero's super-simple interface and support for a wide variety of formats (including HD storage) still make it the best method on the market for actually committing your data to CD or DVD.

Nero • www.nero.com
\$99 (boxed); \$79 (download)

BEST MEDIA PLAYER

Windows Media Player 11

As much as we like iTunes, we still think that Microsoft's ubiquitous do-it-all app wins in terms of overall breadth of features and ease of use. Windows Media Player 11 plays and organizes everything more quickly, cleanly, and compactly than iTunes does,

and although we've noticed that it doesn't seem to be advancing much these days, the app remains just a few steps ahead of its competition.

Microsoft

www.microsoft.com • Free

BEST CONSUMER IMAGE-EDITING SOFTWARE

Adobe Photoshop Elements 7

With improved online sharing and backup, enhanced meta-data support, and a highly intelligent Smart Brush tool for simple but precise effects editing, version 7 of the Photoshop Elements series gives amateur photo geeks even more of the tools they need to create, manipulate, and manage their digital images.

Adobe • www.adobe.com
\$99

BEST PROFESSIONAL IMAGE-EDITING SOFTWARE

Adobe Photoshop CS4

Adobe isn't willing to sacrifice the supremacy of its industry-spanning Photoshop software package by resting on its laurels. The company injected astonishing new life into the version of the software included with Creative Suite 4, including robust new 3D controls and context-aware scaling, which brings smart image cropping and

resizing closer to magic than we've ever seen.

Adobe • www.adobe.com
\$349 (Standard); \$999 (Extended)

BEST CONSUMER VIDEO-EDITING SOFTWARE

Sony Vegas Movie Studio 9 Platinum Edition

Sony Vegas has long been a superb professional video-editing software package, but this year, its consumer equivalent finally got the boost it needed from improved import and export wizards, a royalty-free soundtrack-generation utility, and interactive tutorials to help everyone get the most out of the software's plentiful and powerful editing features.

Sony Electronics
sonycreativesoftware.com
\$84.95

BEST WEB BROWSER

Firefox 3

We never considered Firefox big or bulky—until we saw version 3 this year. But the latest and greatest incarnation of Mozilla's indie Web browser introduces tons of security and usability improvements (it's been months and we're still loving the "Awesome Bar"), all while demanding fewer system resources than its predecessors.

Whether Internet Explorer 8 can steal Firefox 3's considerable thunder could be the most exciting computing question of 2009.

Mozilla • www.mozilla.org
Free

BEST GAME

Mass Effect

BioWare's dynamic space-opera action role-playing game blasted onto the PC this year, thrilling us with its sprawling sci-fi story about the myriad possibilities "out there" and closer to home. The PC version introduced a number of gameplay improvements that made last year's Xbox 360 winner even more thrilling the second time around.

BioWare • www.bioware.com
\$49.99

BEST IPHONE APP

Shazam

How many times have you heard a song in a commercial, only to drive yourself nuts trying to figure out its name? This handy app does the job for you. All you need to do is hold your iPhone up to the speaker, and Shazam will tell you the name of the song and the artist, as well as allow you to download it from iTunes.

Shazam • www.shazam.com
Free

BEST SEARCH ENGINE

Google

Lots of companies have tried to take down Google, but so far, no one has been able to match the search giant's sparkling blend of stark usability and blinding complexity. We do like the new notebook feature for keeping track of the many useful pages you're likely to come across in your searches. But whether used from a Web-browser toolbar or from the home page with its specially designed holiday logos, Google works well every time we need it to. Who could ask for more?

Google • www.google.com

Free

BEST ONLINE PHOTO SERVICE

Flickr

Packed with millions of photos from users all over the world, Flickr is ridiculously easy to master. But in addition to simplifying the process of uploading photos from your PC, your e-mail, or even your cameraphone, it also offers a slew of tools for editing, organizing, and using your images.

An inventive search-engine and mapping functionality can also help you track down the pictures you're looking for in a snap—wherever on Earth they might be.

Flickr • www.flickr.com • Free

BEST ONLINE MUSIC SERVICE

Rhapsody

Rhapsody's partnership with TiVo was definitely an exciting one that delivered a wealth of music directly to you via your television. But even if you don't have a set-top digital video recorder (DVR), the depths of Rhapsody's navigational controls and search capabilities, its constantly updated lyric libraries, and the ease with which it allows you to discover new artists and songs that match your personal tastes help make it one of the most dynamic music services out there. With one free plan (and the most expensive one topping out at \$14.99 per month for unlimited plays), it's also one of the greatest bargains.

Rhapsody

www.rhapsody.com

Free; \$14.99 (unlimited plan)

BEST FREE ONLINE SERVICE

Google Maps

Among the (many) Google creations we never get tired of using, Google Maps stands out for its surprising usefulness. Until it came along, we never realized how limited other mapping services were, but Google Maps' intense detail, editing and correction capabilities, and especially its Street View function (so you can literally see where you're going), keep it at the very top of our list of online services we consult whenever we go anywhere.

Google

www.googlemaps.com • Free

BEST FREE DOWNLOAD

WebGuide

If you've got a home theater PC that runs Windows Media Center (whether in XP or Vista), you need WebGuide. With it, you can access your Media Center content—photos, music, and even live and recorded TV shows—from any machine equipped with a Web browser (cell phones and other mobile

devices included). If you have a Windows Home Server at home, a special version of the software lets you link up with it; if you use Vista remotely, a Sidebar gadget makes it even easier to hook up with WebGuide.

WebGuide

www.asclixpress.com/webguide • Free

BEST WEBMAIL SERVICE

Gmail

Google just won't stop rolling out new features for its terrific Web-mail app. Gmail now features better compatibility with the iPhone and with AOL Instant Messenger, as well as group chats, better labeling and organization functionality, and support for attachments up to 20MB in size. Combined with its clean look and intuitive interface, these changes kept Gmail at the top of this increasingly competitive category.

Google • mail.google.com

Free

BEST BLOGGING SERVICE

Twitter

When House Republicans met

Best Video Service

Hulu

Given all the usual talk about YouTube and piracy, we can't blame major TV networks like Fox and NBC for wanting to maintain control over their own shows.

But we never expected their venture to turn out as well as Hulu. Its large assortment of popular TV shows and movies has noticeably better video quality than you'll typically find scouring BitTorrent or video-sharing sites, and that makes a huge difference. Clips on Hulu look so good, in fact, we don't even mind that the service is supported by advertisements.

Hulu • www.hulu.com • Free



Internet Services

THESE ONLINE TOOLS ARE THE BEST THE WEB HAS TO OFFER.



Netflix



Rhapsody

during the Congressional recess to debate high gas prices, they overcame their lack of C-SPAN with Twitter. The addictive online service's reputation preceded those headlines, however, thanks to its ability to make blogging quicker and more immediate than ever. Just a sentence here and a few words there, nonstop over the course of the day, have revolutionized online chatter. The fact that you can send and receive messages from a number of devices (and turn off updates if you want to be left alone) help make this good, free thing better still.

Twitter • www.twitter.com
Free

BEST SOCIAL-NETWORKING SERVICE

Facebook

We know, we know: Not every one likes the new interface. But Facebook's allure as the Web's premier place to keep track of and interact with your friends and family hasn't dulled. Whether it's through quick-hit status updates, multiplayer games or quizzes, or simple Wall posts and instant messaging, Facebook is the smoothest and easiest-to-use service of its type we've ever seen. And its versatility and wide user base only mean it will continue to improve into 2009 and beyond.

Facebook
www.facebook.com • **Free**

BEST FOR-PAY ONLINE SERVICE

Netflix

Getting DVD or Blu-ray movies sent directly to your mailbox is great. So is being able to stream videos online—at no extra charge. But these services aren't the unique phenomenon they once were. Where Netflix shines is in its devotion to its customers, and that stood out in 2008 as never before. When a group of users responded negatively to the company's plan to discontinue multiple user profiles per account, Netflix backed down on making the change. And when shipping problems kept Netflix discs from getting out, Netflix refunded those who were affected. Well-played, Netflix—we're more likely to give our money to companies that view us as more than dollar signs.

Netflix • www.netflix.com
\$4.99 to \$16.99 per month

BEST MOBILE SERVICE

Yahoo Mobile

Okay, so you don't have the dough for an iPhone. Yahoo's robust collection of mobile services renders that moot. Whether you need standard e-mail, photo, and mapping functionality; the ability to search for information wherever you are or connect with

your friends and family over a variety of instant messaging systems; or to just pore through a digital scrapbook that's always at your fingertips, the Yahoo Mobile service has what you need, and then some.

Yahoo • mobile.yahoo.com
Free

BEST FILE-DELIVERY SERVICE

YouSendIt

If you've ever tried to send a photo, video, or music file to a friend or family member, you know what you're up against: either e-mail servers that won't accept large files, or the complexity of setting up an FTP server. A better solution is YouSendIt, which lets you traffic up to 1GB worth of 100MB files per month for free and offers a number of paid services for additional disk space and bandwidth. Detailed download statistics and file-delivery tracking help you keep track of who's getting what you're sending.

YouSendIt
www.yousendit.com
Pricing plans vary

BEST ONLINE STORAGE

Mozy

Data loss shouldn't be a given in anyone's computing life. To guard against it, you need to back up, and Mozy offers an array of options to

meet everyone's needs. You can get 2GB for free (you don't even need a credit-card number), or pay just \$4.95 per month per computer to back up as much as you need. Just download the Mozy software, select the files, and you're ready to go—advanced backup techniques, high-caliber encryption, and automatic scheduling functionality are all included in the price.

Mozy • www.mozy.com
Free; \$4.95 per month (unlimited plan)

BEST WEB SITE YOU'VE NEVER HEARD OF

FactCheckEd.org

Maybe we're just hypersensitive because it's an election year, or because the Internet has made it so much easier to keep track of who's saying what. But it seems like there's more misinformation than ever floating around out there. The Annenberg Classroom Fact Check helps students and teachers sift through it all. Lesson plans using real-world examples, a guide to reliable Web sites, tutorials on discerning the truth, and lots more are all terrific tools to give kids the critical-thinking skills they need to survive in a world increasingly fueled by cut-throat communication.

FactCheckEd.org
www.factchecked.org
Free

BEST 1080P LCD HDTV

Samsung LN52A650

When the LN52A650 was released, everyone took note of its unique design characteristics (dark red accents along the edges) and high price. But on deeper inspection, the LN52A650 also showed itself to be one of the best HDTVs on the market, wowing us with its excellent blacks, pinpoint-accurate color reproduction, and blur-eliminating 120Hz refresh rate. The 52-inch unit also offers an Ethernet port, which allows for online access and gives any channel an instant news ticker with stocks, current events, and weather information.

Samsung

www.samsung.com • \$2,799

BEST PLASMA HDTV

Panasonic Viera TH-50PZ800U

With a sophisticated design and an excellent antireflective screen, the TH-50PZ800U has turned more than its fair share of heads this year. That's only the tip of this HDTV's appeal, however. This 50-inch unit packs a THX mode that greatly improves color performance and video processing,

while keeping blacks looking deep and inky.

Panasonic

www.panasonic.com • \$2,499

BEST REAR-PROJECTION HDTV

Samsung HL61A750

Rear-projection televisions, which were kings of the home entertainment landscape years ago, are now a dying breed due to competition from plasma sets. But the HL61A750 proves that rear-projection sets aren't going down without a fight. It offers a fantastic-looking 61-inch screen with three picture modes and plenty of connection ports. It displays some of the best-looking blacks and colors you'll see on a set of its type—as long as you're willing to tweak the settings a bit.

Samsung

www.samsung.com • \$1,999

BEST DIGITAL VIDEO RECORDER

Dish Network VIP722 HD DVR

The Dish Network VIP722 HD DVR is a high-capacity HD unit that was one of the first to receive and record MPEG-4 AVC programming. With it you can watch a show while recording three other programs at the

same time. You can also hook it up to an external hard drive through a USB port for added storage, and skip through programs at 30-second intervals—great for jumping past commercial breaks.

Dish Network

www.dishnetwork.com

Pricing varies

BEST UNIVERSAL REMOTE CONTROL

Logitech Harmony One

It may be expensive, but the Logitech Harmony One blows every other remote control out of the water with its marvelous 2.2-inch color touch screen, gloriously redesigned button layout, and cool backlighting. This infrared unit offers support for up to 15 devices at once and features Smart State Technology, which allows the remote to track, control, and store vital information on the various units in your home entertainment setup.

Logitech.com • www.logitech.com

\$249.99

BEST HOME-THEATER-IN-A-BOX

Sony HT-CT100

Sony's HT-CT100, a single-speaker audio masterpiece, was one of the hidden values

of 2008, serving up great surround-sound performance at a price that won't empty your wallet. The small soundbar system also comes with three HDMI inputs and a thumping subwoofer. And it's easy to set up, to boot. If you have a big-screen television and want to take your sound to another level, the HT-CT100 can take you there.

Sony Electronics • www.sonystyle.com

\$399.99

BEST MEDIA STREAMER

Roku Netflix Player

Netflix has done as much to transform the film fan's world as the advent of DVRs. This year, the company attempted to mix the two with its Netflix Player from Roku. It allows you to have access to a sizable portion of the Netflix library and watch it immediately. (The unit wisely keeps your streaming-movie and physical-DVD queues separate.) With the prospect of great firmware updates and an ever-expanding library of titles, the Roku player may soon become as essential to the film fan as a Netflix subscription.

Netflix.com • www.netflix.com

Pricing varies

Best Budget LCD HDTV

Samsung LN32A450

Small screens can still show off great power, as the gloss-black 32-inch Samsung LN32A450 shows. We were blown away by its brilliantly deep blacks, well-saturated colors, and marvelous, booming sound. What's more, it comes with a ton of comprehensive features, including an intuitive menu, three standard picture modes, five color-temperature presets, and three power-saver modes.

Samsung.com • www.samsung.com

\$799.99



Logitech Harmony One

Home Theater

THE BEST A/V EQUIPMENT FOR YOUR LIVING ROOM.

Product of the Year

2008'S MOST MEMORABLE PIECE OF TECHNOLOGY

The Netbook

Not every year sees the creation of a whole new category of computer.

But 2008 did, and it's one that will revolutionize the technology landscape in 2009—and for years to come. Netbooks—budget ultraportables—have made it possible for anyone with just a few hundred bucks to buy a system that will fit in their hands, purses, and pockets, enabling them to surf the Web, send e-mail, or do other basic tasks anywhere with an Internet connection.

These aren't powerful computers able to run high-impact games or complex software, but they don't have to be—they just need to meet the everyday needs of everyday people. And everyday people have certainly responded: At the start of the year, Asus' original Eee PC became an instant hot seller, and similar products from companies such as Acer, HP, and MSI have proven almost as popular. Before year's end, we were hearing rumbles that major manufacturers were questioning the impact of these systems on their business. Anything that so redefined our industry had to be our product of the year. With tiny computers like these, will people still want to shell out \$1,000 or more for a full-size notebook? Stay tuned.



Technology of the Year

Draft 802.11n

Although the Draft 802.11n wireless networking protocol isn't expected to be ratified until 2009 (currently, it's version 2.0), the market has already been inundated with products from nearly every networking manufacturer. Even new Wi-Fi-enabled laptop computers

now adhere to the spec. Why would companies put so much effort behind an unapproved technology? That's because the latest draft will essentially be the final spec, and it's backed by the Wi-Fi Alliance consortium of more than 300 companies, which includes Apple, Cisco, Dell, Intel, Microsoft, Motorola, Nokia, and Sony. Unlike the "Pre-N" networking products of several years ago, which were based on preliminary specs that failed to deliver the promised performance enhancements over 802.11g, Draft 802.11n will allow for more-demanding tasks, such as video streaming to multiple computers. Think of it as a future technology that's available now.



Get the Best Prices on Technology Products.

Compare prices on over **300,000 products** from thousands of vendors using ComputerShopper.com's Best Prices shopping engine.



- **Most Popular Products -**

Laptops, Desktops, Components, Drives & Storage, MP3 Players, Digital Cameras, Monitors, Printers, TV's and Software.

- **Deal Hunter -**

A new daily deal from our secret shopper.

VISIT TODAY!

Find the lowest price on the technology you crave by:

- > brand
- > specs
- > popularity
- > and more!

The most comprehensive guide to today's technology.
Visit us online. Get more of what you love.

**COMPUTER
SHOPPER**

ComputerShopper.com/best-prices

Get Your Game on, On the Go

These gaming laptops give you the power you need to play any game you want, anywhere you go.



Edited by Matthew Murray

Every year, there appear to be fewer and fewer differences—in terms of capability, at least—between laptops and desktops. Until recently, we never took notebooks seriously as gaming platforms; their smaller size generally limits the space for components and cooling—two things no true gamer should ever be without.

But 2008's crop of gaming laptops makes a convincing case for the notebook as gaming center. New processor technologies from Intel, as well as graphics from Nvidia and AMD, have helped today's notebooks catch up to their desktop counterparts. In some cases, performance and visuals are almost as good as it gets.

We tested five gaming laptops across a wide spectrum of prices—from major companies and smaller manufacturers alike—to see what features and performance you can expect, whether you're hunkered down at home or taking your game on the road.

Alienware Area-51 m17x

Editors' Rating: 7.7 out of 10

Pros: Unparalleled graphics performance; well-ventilated chassis; large HD display; spacious, backlit keyboard with number pad; excellent assortment of input, output ports

Cons: Pricey; incredibly large, heavy; powered by last-generation Santa Rosa chipset; does not support U/D CFX switching

IF YOU WERE HOPING for an exciting new refresh to Alienware's Area-51 line of gaming laptops, you'll be dissatisfied by the m17x. Our deluxe-price review model didn't feature the very latest core laptop tech, such as Intel's Centrino 2 platform—disappointing, considering its \$5,998 price. Plus, the system packed a pair of rebranded GeForce 9800M GT

Alienware
Area-51
m17x

 For more: computershopper.com/laptops

FEATURE COMPARISON

	Alienware Area-51 m17x	Eurocom M570TU Montebello	Gateway P-7811FX	iBypower Battalion 101 CZ-9 Ultra	Maingear eX-L
EDITORS' RATING	7.7	8.0	8.3	8.2	8.4
CONFIGURATION					
Processor	2.8GHz Core 2 Extreme X9000	2.53GHz Core 2 Duo P9500	2.26GHz Core 2 Duo P8400	2.5GHz Core 2 Duo T9400	3GHz Core 2 Extreme X9100 (overclocked to 3.33GHz)
Memory	4GB DDR2	4GB DDR2	4GB DDR3	4GB DDR2	4GB DDR3
Hard Drive(s)	Two 500GB hard drives (RAID Level 0); one 500GB hard drive	320GB hard drive	200GB hard drive	250GB hard drive	Two 320GB hard drives (RAID Level 0)
Optical Drive	Blu-ray burner	DVD±RW	DVD±RW	DVD±RW	DVD±RW
Display	17-inch TFT	17.1-inch TFT	17-inch TFT	15.4-inch TFT	17-inch TFT
Graphics	Dual Nvidia GeForce 9800M GT (512MB, SLI)	Nvidia GeForce M9800GT (512MB)	Nvidia GeForce 9800M GTS (512MB)	Nvidia GeForce 9600M GT (512MB)	Dual ATI Radeon HD 3870 (512MB, CrossFireX)
Operating System	Windows Vista Home Premium	Windows Vista Ultimate (64-bit)	Windows Vista Home Premium (64-bit)	Windows Vista Home Premium	Windows Vista Ultimate
COMPANY	Alienware 800-254-3692 www.alienware.com	Eurocom 877-387-6266 www.eurocom.com	Gateway 888-888-2075 www.gateway.com	iBypower 800-915-1849 www.ibypower.com	Maingear 908-624-9050 www.maingear.com
DIRECT PRICE	\$5,998	\$2,450	\$1,399	\$1,255	\$4,068

graphics chips, which are more than capable but are GeForce 8800GTXs in all but name. That said, this powerhouse gaming laptop is still very good, and though it fails to break new ground, it's tough to argue with Alienware's "if it ain't broke, don't fix it" logic.

The m17x is as full-figured as ever, tipping the scales at over 10 pounds. That's not exactly backbreaking, but this is not a laptop you'll be lugging on your daily commute without a chiropractor on retainer. The laptop's 2.1x16.1x11.5-inch (HWD) frame occupies a fair amount of real estate; you may have to clear off that messy desk to make room, although the chassis does provide good airflow and heat dissipation, thanks to its rear-exhaust cooling and front and bottom vents. During our testing, the palm rests and the large backlit keyboard and number pad hardly warmed up, although the 17-inch screen's bezel got a bit toasty after an hour or two.

Lining the left and right sides is a do-it-all set of inputs and outputs. On the left you'll find 3.5mm and optical audio jacks, an S-Video connector, three USB ports, a digital TV tuner, and a slide-out Blu-ray burner; on the right reside a MultiMediaCard reader, an ExpressCard slot, another USB port, nine- and six-pin FireWire ports, HDMI, and Gigabit Ethernet. (The system also has 802.11n wireless and Bluetooth.) Simply put, whatever device you want to connect to the m17x, you're most likely covered.

We were disappointed, however,

that Alienware skipped on incorporating Centrino 2 technology, because the new chipset offers a faster front-side bus, as well as no-reboot-needed switching between integrated and discrete graphics. The omission is even more glaring when you consider that the m17x supports no graphics switching at all; its predecessor, the m15x, featured a U/D GFX key to switch hardware with a reboot. The m17x does support a Stealth mode, however, which lets you underclock the CPU and GPU to conserve power.

Energy conservation has never been Alienware's strong suit; its laptops have always favored raw, unadorned power, and the m17x is no exception. The m17x lasted only 56 minutes on our DVD rundown test using its discrete graphics. The machine's 2.8GHz Core 2 Extreme X9000 processor and 4GB of DDR2 RAM demolished every productivity test we threw at it. The m17x scored about even with the m15x except on PCMark05, on which the m17x scored 7,242 versus the m15x's 7,520, due to the m17x's dual hard disk configuration with one terabyte of space. (We're fine with that trade-off.) The m17x needed 5 minutes and 20 seconds for our Windows Media Encoder test, and 3 minutes and 16 seconds for our iTunes conversion test. Its results on our Cinebench 9.5 and 10 rendering tests were 935 and 5,836, respectively.

In the graphics department, the m17x's dual 512MB 9800M GT chips are tops—even if they're identical to last generation's 8800GTXs, from the

number of shaders (96) to memory, core speeds, and the 65-nanometer manufacturing process. The one subtle difference is that Nvidia will officially support PhysX and CUDA—software enhancements that offload processing and game-physics chores onto the GPU—in its 9000 series. (Users of 8000-series chips will have to make do with beta drivers, for the time being.) You won't hear us complain, though, as the m17x's Scalable Link Interface (SLI) configuration helped pound out scores of 12,579 on 3DMark06 and 6,472 on 3DMark Vantage (the latter using the Performance preset). We got top-notch performance on F.E.A.R., in which the m17x delivered 184 frames per second (fps) at 1,920x1,200 and 4x anti-aliasing; we also saw 128fps in Company of Heroes. Plus, when we played Incubus's *Alive at Red Rocks* disc, Blu-ray playback was smooth and crisp on both the m17x's LCD and on a 42-inch View Vu42LF HDTV connected via the HDMI port.

Eurocom M570TU Montebello

Editors' Rating: **8.0** out of 10

Pros: Great screen, speakers, components; strong all-around performance

Cons: Finicky touch pad; loud optical drive; finish shows fingerprints

EUROCOM MAY NOT BE as well-known here in the States as companies like Dell or HP, but perhaps it should be. The company's M570TU Montebello is a solid high-end machine that can function not only as a strong midrange gaming laptop, but also as a high-end professional workstation. It can compete favorably with anything offered

by the more recognizable competition.

Our \$2,450 test configuration was built around a 2.53GHz Intel Core 2 Duo P9500 processor with 4GB of RAM, a 512MB Nvidia GeForce Go M9800GT GPU, and a traditional hard drive with 320GB of storage capacity, but you can go to the company's Web site to scope out a model with a quad-core Core 2 Extreme QX9300 processor, up to 8GB of RAM, a 1GB GeForce Go M9800GT GPU, and a solid-state drive—at a higher price, of course. Eurocom is also working on a mobile variant with an Nvidia G200-based GPU with 1GB of GDDR5 memory for even stronger video performance.

Although the styling may not appeal to everyone, we think Eurocom did a nice job with the M570TU Montebello notebook's fit and finish. The exterior features a gloss-black coating with edges trimmed out in a copper metallic hue and a sturdy, brushed-metal lid. The machine's aesthetics exude an aura of high performance; the only drawbacks to the Montebello's finishes are that they're prone to fingerprints, but they can be cleaned easily enough.

The Montebello's large 17.1-inch LCD screen is also a sight to behold. Its glossy coating results in great contrast, and the screen's 1,920x1,200 resolution offers ample desktop real estate to open multiple applications simultaneously without feeling too cramped. As is the case with all glossy screen coatings, however, glare is an issue in brightly lit environments. The machine's side-mounted speakers are very good, and produced surprisingly full audio with discernible bass.

Above the screen sits a 2-megapixel Webcam that captured fairly decent images and video; just below the screen, adjacent to the power button on the notebook's main housing, is a trio of media buttons. One launches the system's default Web browser and another its default e-mail client, while the last

switches between normal and silent fan profiles. Changing fan modes has a significant impact on the system's noise levels, although the M570TU is relatively quiet for such a powerful machine, even in normal mode.

The M570TU has inputs and outputs situated around all four of its edges. At the front are seven LED indicators and an infrared sensor, along with four centrally mounted audio jacks for headphone, microphone, line-in, and line-out. (A microphone is integrated into the right side of the notebook's palm rest, as well.) On the right side are an ExpressCard slot, a memory-card reader, two USB ports, a FireWire port, modem and LAN jacks, and an input connector for a cable-TV feed, should the notebook be configured with the optional TV tuner. The rear features S-Video, HDMI and DVI display outputs, external Serial ATA (eSATA), and two more USB ports. The optical drive and a Kensington lock slot are located on the left.

Our experience with the M570TU was

generally enjoyable. As with all 17-inch-class desktop-replacement notebooks, the machine's large form factor (1.8 inches high at its thickest point, 15.9 inches long, and 11.4 inches deep) and weight (8.7 pounds) hinder its mobility. We also found that the machine's DVD burner was loud when reading a disc, and the keyboard had too much flex.

The unit's exceptional performance and stability overshadowed these minor quibbles, however. As we expected from a notebook featuring such powerful hardware, the M570TU Montebello churned through our benchmark suite with aplomb. The machine scored 7,066 in 3DMark06 running at the screen's native resolution, and banged out an impressive 98fps and 55.2fps, respectively, in F.E.A.R. and Company of Heroes at 1,920x1,200. The unit scored 850 in our Cinebench 9 rendering test and 6,020 in Cinebench 10, and completed our iTunes conversion task in a quick 3 minutes and 50 seconds.

All that performance comes at the ex-

Eurocom
M570TU
Montebello



pense of battery life, however. The M570TUS battery survived for only 1 hour and 58 minutes in our DVD rundown test; that result is typical for a big-screen notebook.

Gateway P-7811FX

Editors' Rating: **8.3** out of 10

Pros: Great performance for the price; good battery life; comfortable keyboard; crisp display

Cons: Loud cooling fans; awkward touch-pad placement; subpar DirectX 10 performance

GATEWAY HAS UPDATED its FX gaming notebook lineup with Intel's high-performance Centrino 2 mobile chipset, and the result is the \$1,399 P-7811FX, which delivers superb performance for the money. (It's currently available only at Best Buy.) Despite its general excellence, it's a midrange model that can't compete with pricier notebooks, although it's the fastest notebook we've tested in this price range. Its biggest fault is its noisy cooling fans, which spin up frequently.

The P-7811FX uses the same black-and-copper chassis with faux carbon fiber as all previous FX machines; the only changes here are internal. Inside, the Centrino 2 chipset promises better performance, improved wireless range, better battery life, and compatibility with new DDR3 memory. This unit features a 2.26GHz Core 2 Duo P8400 processor with 4GB of DDR3 memory, and it uses the 64-bit version of Vista to take advantage of all that memory.

Even more tantalizing is the presence of Nvidia's new mobile video card, the GeForce 9800M GTS, with 512MB of memory. The GTS card is the lowest-end model in the GeForce 9800M series, with 64 stream processors and Nvidia's PureVideo HD engine for offloading Blu-ray decoding demands from the CPU. The HD decoding isn't a concern on this notebook, however, as it features a DVD burner instead of a Blu-ray drive, which isn't surprising given its price.

Gateway endowed the P-7811FX with a gorgeous 17-inch wide-screen display that has a glossy coating and a native resolution of 1,920x1,200. It's paired with a full-size keyboard complete with number pad, and the media-control buttons below the LCD are easy to use. The keyboard is very comfortable, though the touch pad feels like it would be easier to use if it were moved an inch or two to the right. Storage is handled by a speedy 7,200rpm 200GB hard drive, and you can

also add a second drive to the system.

Given its size, it's no surprise that this notebook is loaded with expansion ports and connectors. It features three USB ports, a FireWire jack, a multifunction memory-card reader, an ExpressCard slot, and VGA and HDMI outputs. There are also microphone and headphone jacks, a 1.3-megapixel Webcam built into the LCD bezel, and an eSATA port.

The P-7811FX's benchmark performance was very good for a laptop in this price range, if predictably not up to par with more expensive machines. On the CPU front, it breezed through our iFunes encoding test in 3 minutes and 26 seconds and racked up 4,577 on our Cinebench 10 test. Its PCMark Vantage score of 4,305 was also very good, though PCMark05 would not run. It took 6 minutes and 39 seconds to complete our Windows Media Encoder test.

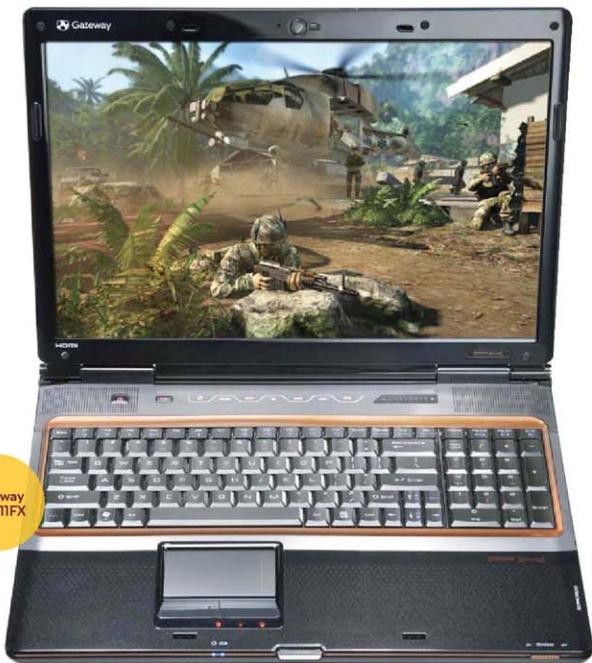
On the gaming side of the equation, the P-7811FX fared quite well for a notebook in this price range, although its

1,920x1,200 display is both a blessing and a curse. Though the screen makes for an immersive gaming experience, the GeForce 9800M GTS graphics chipset doesn't have enough horsepower to run the latest games at the LCD's native resolution. It ran our Company of Heroes DirectX 10 (DX10) benchmark test at just 20fps at the native resolution, for example, and was playable—barely—at 1,024x768, scoring 31.3fps. DX9 performance was much better, however: Company of Heroes ran at 52fps at 1,920x1,200, and F.E.A.R. played at a silky smooth 58fps at 1,600x1,200. The P-7811FX also scored 7,163 in 3DMark06 at 1,600x1,200.

We wouldn't blame you if you assumed that all this power would make quick work of the P-7811FX's nine-cell battery. But the Gateway's battery scored better than average in our DVD rundown test, running for 2 hours and 12 minutes.

During performance tests, we noted that the P-7811FX's cooling fans spun up

Gateway
P-7811FX



not only when the notebook was churning data, but also for no apparent reason. If we merely opened a Web page or tried to install a program, or even if the laptop was idle at the desktop, the fans would randomly spin up as if the system was in distress, which was not the case. Even worse, when we closed the lid to put it in Standby mode, it would still ratchet up its fan speed. This behavior is not a deal-breaker, but annoying enough that rather than just leaving it on, we put the system to sleep when we weren't using it.

iBuypower Battalion 101 CZ-9 Ultra

Editors' Rating: **8.2** out of 10

Pros: Great performance for the price; good battery life

Cons: Unremarkable display; plain design

THE GAMER WHO ISN'T inclined to lug around a bulky notebook has a lot of good choices among 15.4-inch laptops these days. The iBuypower Battalion 101 CZ-9 Ultra (\$1,255 in our test configuration) fits in comfortably with them.

What the Battalion lacks, and what might cool its appeal for some budget-minded enthusiasts, is a sense

of style. Like many notebooks from manufacturers slightly outside the mainstream, its appearance is decidedly drab: It has a glossy, dark-brown lid, but is otherwise basic black all around. This plainness extends to the unit's display, a glossy 15.4-inch (1,280x800) wide-screen LCD that works well enough during gaming sessions but whose image quality certainly didn't wow us.

Beneath the unexciting exterior, however, we found a notable performer with gaming prowess that outstripped that of similarly priced mid-size notebooks. The Battalion's 2.5GHz Core 2 Duo T9400 processor, working in tandem with 4GB of DDR2 RAM and 512MB Nvidia GeForce 9600M GT graphics, delivered marvelous results in our benchmark tests for a machine in its price stratum.

The Battalion pulled in 3,987 in our PCMark Vantage general-performance test, and it posted a score of 850 in Cinebench 9.5 and 5,292 in Cinebench 10. It took 3 minutes and 33 seconds to convert 11 songs in

iTunes and 5 minutes and 53 seconds to zip through our Windows Media Encoder test. Its 3D performance was better still, turning in an impressive 5,142 in 3DMark06 at 1,024x768 and a slightly lower 4,576 at the system's native resolution. Only six months ago, scores like these were the domain of much more expensive configurations. The Battalion also fared well in our Company of Heroes test, showing an excellent 62 fps at 1,024x768 and a respectable 38fps at the native resolution with anti-aliasing enabled.

One practical caveat: The Battalion weighs 6.5 pounds. That's typical for a notebook with a 15.4-inch screen, but far from comfortable for an everyday commuting companion. Still, when you do take it on the road, you'll be pleasantly surprised by the system's fine battery life: 3 hours and 2 minutes, as measured in our DVD run-down test.

As for other features, iBuypower equipped the laptop with a standard array of wireless options and connectors, including a three-format card



ZT recommends Windows Vista® Home Premium.



ZT Affinity The Latest Technology... For Less!

Select the Powerful Notebook or
Desktop That's Right For You



ZT Affinity Desktops featuring Intel® Core™2 Quad Processors

ZT Affinity 7207XI Desktop

- Intel® Core™2 Quad Processor Q6600
- Genuine Microsoft® Windows Vista® Home Premium Edition (64-bit) SP1
- 4GB DDR2 SDRAM Memory
- 500GB SATA Hard Drive
- 20x DVD±R/RW Dual Layer Burner
- Front Panel 15-in-1 Digital Media Drive

As low as: **\$599^{99*}**

QUAD-CORE
PERFORMANCE

Model #: ZT-7207XI-35

Step up to the

ZT Affinity 7225XI Desktop

- And Upgrade to:
- ATI HD 3450 512MB Graphics with HDMI / DVI output for advanced digital entertainment

As low as: **\$699^{99*}**

Model #: ZT-7225XI-35



Shown with
display sold separately.

ZT Affinity Notebooks featuring Intel® Centrino® 2 processor Technology

ZT Affinity N4003I Notebook

- 15.4 Inch WXGA Display (1280x800)
- Intel® Core™2 Duo Processor P7350
- Genuine Microsoft® Windows Vista® Home Premium Edition (64-bit) SP1
- 4GB DDR2 Memory 250GB Hard Drive
- 20x DVD±R/RW Dual Layer Burner
- Integrated 1.3mp Webcam
- Dedicated Numeric Keypad

As low as: **\$899^{99*}**

LATEST MOBILE
TECHNOLOGY

Model #: ZT-N4003I-17

Step up to the

ZT Affinity N4004I Notebook

- And Upgrade to:
- 320GB SATA Hard Drive
- 2GB Intel® Turbo Memory w/ Dashboard
- Intel 5300 Wireless Card & Bluetooth

As low as: **\$999^{99*}**

Model #: ZT-N4004I-17



Get yours today at these online retailers:



www.circuitcity.com



www.costco.com

www.target.com

FREE!



Get a new Maxtor™ 80GB
OneTouch™ 4 Mini HD, FREE!

Buy a new ZT Affinity PC with
Windows Vista Premium operating
system and get a BONUS PACK of
hardware accessories after mail-in
rebate including a new Maxtor
OneTouch 4 Mini 80GB External
USB Drive. Find out how at:

ZTsystems.com/bonuspack

*May affect limited time instant savings offers. Pricing and model availability varies by retailer. Additional shipping and handling charges may apply.

† Offer ends 10/31/07. While supplies last. Limited time offer. While supplies last. Offer requires purchase of new ZT Affinity PC with Windows Vista Premium operating system. Offer may be subject to change without notice. Intel, Centrino, and Core are trademarks of Intel Corporation in the U.S. and other countries.

www.ztsystems.com/computershopper

866-984-7687



©2007 ZT Systems, Inc. All rights reserved. ZT Systems, Inc. is a registered trademark of ZT Systems, Inc. All other trademarks are the property of their respective owners. Intel, Centrino, Core, and Vista are trademarks of Intel Corporation in the U.S. and other countries.

reader, 802.11n Wi-Fi, HDMI out, three USB ports, a VGA port, Ethernet, and S-Video. There's also a 2-megapixel Webcam just above the display. The system is backed by a one-year warranty.

Maingear eX-L

Editors' Rating: 8.4 out of 10

Pros: Fantastic performance; great display; nice design; plenty of ports; spacious keyboard

Cons: Large; heavy; expensive

MAINGEAR'S eX-L gaming notebook, at \$4,068 in our test configuration, is no steal, nor does it have the stylistic extravagance of a typical Alienware offering. But if you put performance above value or singular design, the eX-L will not disappoint.

The eX-L is clad in glassy carbon fiber, giving the notebook a cool, black look (though it's easily marred with smudges). Its DVD±RW drive is located, strangely enough, below the palm rest, wedged between two embedded speakers. This took some time for us to get used to, but it does have a practical benefit: By removing the speakers

from the top of the keyboard, Maingear made the keyboard and palm-rest area feel much more spacious, despite the small-by-comparison touch pad. In fact, we found the palm rest large enough to accommodate not only our palms, but also a significant portion of our forearms.

This attention to detail, along with the unit's full-size keyboard, made the eX-L one of the most comfortable desktop-replacement notebooks we've tested recently. And unlike other GPU-strapped systems, the eX-L stayed cool during hot gaming sessions, thanks to its efficient cooling system. The unit's display is a fine 17-inch TFT with a native resolution of 1,920x1,200, which looked terrific whether playing games or DVDs. Connectivity options are just as attractive, with ports that include three USB, eSATA, Ethernet, HDMI, and FireWire. You also get a monitor connector, Bluetooth and 802.11n Wi-Fi connectivity, a Webcam, and a fingerprint reader.

Aside from all the treats, performance is where the eX-L excels. Based

on Intel's Centrino 2 platform, the laptop is powered by a 3GHz Intel Core 2 Extreme X9100 processor (overclocked to 3.33GHz), a generous 4GB of RAM, and two 320GB hard drives in a RAID Level 0 configuration. These components helped the system turn in some outstanding results in our productivity tests: 4,366 in Futuremark's PCMark Vantage, 1,096 in Cinebench 9.5, and 6,923 in Cinebench 10—in every case, among the highest scores we've ever seen from a notebook. The eX-L needed just 4 minutes and 30 seconds to zip through our Windows Media Encoder trial, along with a superquick 2 minutes and 40 seconds to convert 11 songs in iTunes.

The eX-L's 3D prowess is its main attraction. Its twin 512MB ATI Radeon HD 3870 GPUs, running in a CrossFireX configuration, delivered blazing scores in our gaming tests. The notebook's score of 6,560 in 3DMark Vantage on the Performance preset edged out the Alienware Area-51 m17x just slightly; its 15,364 3DMark06 score at 1,024x768, and 12,665 score at the screen's native resolution, are similarly noteworthy. The eX-L cranked out an average frame rate of 215fps in Company of Heroes at 1,024x768, with its frame rate dropping to a still-strong 74fps when we ran it at the native resolution with anti-aliasing enabled.

The 11-pound eX-L's battery life fared well for a gaming system, lasting 1 hour and 38 minutes in our DVD rundown test. Of course, if you're going after such a system, performance, not portability, is probably the first thing on your mind. And with the eX-L, that definitely doesn't come in second.

Marco Chiappetta, Matthew Murray, Josh Norem, Serguei Servianov, and Mike Spitznieri contributed to this roundup.

Maingear
eX-L



For more: computershopper.com/byolaptop



Quad-Core. For the hardcore.

Play like a pro with a new PC featuring the Intel® Core™2 Extreme Quad-Core processor.

ABS builds some of the most highly regarded computing solutions in the industry.



Visit: www.abs.com or call: 800.926.8088

Ultimate X Magnum Extreme



Starts at \$5899

- Intel® Core™2 Extreme Quad-Core Processor QX9650
- ABS Canyon 695 Aluminum Super Full Tower Computer Case
- ABS BZ1100W Power Supply



Intel is not responsible for and has not verified any statements or computer system product specific claims contained herein.

Traveling with your tech doesn't have to be a hassle. These essential tools will help you create a mobile office—wherever you are.

By Les L. Shu

Road-Ready Gear

Whether you're moving by plane, train, or automobile, travel these days can be fraught with frustrations. Long security lines, runway traffic jams, and other hassles make flying these days a chore before you even get off the ground. And ground travel has its own pains—especially, with fuel prices sky-high, in your wallet.

The last thing you need is tech that weighs you down. But by choosing some key pieces, you can assemble an array of gear that travels as well as you do—and keeps you productive during all of that waiting time. These products will bring a much-needed smile to the face of any put-upon road warrior.

POWER ON THE GO

Keeping your devices charged when you're away from home or your office is challenging. Coffee shops, airports, and even airplane cabins have increased the number of available power outlets, but you can't always rely on having one at hand.

To keep your portable electronics juiced up long enough until you can recharge them, pack a portable battery like Kensington's Power Pack (\$59.99, www.kensington.com), a slim, lightweight battery that, according to Kensington, adds up to 55 extra hours of music-playing time on an iPod and 5 hours of talk time on a cell phone. The

Power Pack charges over USB, and you can purchase optional power tips that match the power port of your cell phone, Nintendo DS, or Sony PlayStation Portable. Plus, you can use it as a power adapter for all your portable gear, eliminating the need to carry multiple adapters.

If you need power in a hurry, Energizer (www.energizer.com) offers a quick solution with its Energi to Go line of products, which let you recharge your cell phone and iPod using off-the-shelf, lithium-based AA batteries. These rechargers are readily available at supermarkets, electronics retailers, and office-supply stores.

If you like the idea of not carrying all your chargers with you but don't need



Targus Travel Power Outlets

an actual portable power source, the Chargepod from Callpod (\$39.95, www.callpod.com) is a handy USB-based gadget that charges up to six devices through optional adapters that cost \$10 each.

Adapters are available for a variety of portable devices, including iPods, digital cameras, cell phones, and portable gaming devices. If you'll need to recharge larger equipment, such as a laptop, consider a universal power adapter that uses interchangeable tips for connecting to various laptop brands. Some also include a USB port to power portable devices. Manufacturers of universal power



Kensington Power Pack



Callpod Chargepod

Traveler's Tip

Before Craig Albano travels for work, he makes sure his BlackBerry is not only synchronized with his computer for e-mail, but also with any important details he may have jotted down in Outlook's Notes feature (where you can create Post-It-like notes within Outlook). "I have a lot of backup info there," says Albano, the production manager for Target Analytics, a database-management-services company in Cambridge, Mass. "I have the set-up information for our [virtual private network] and the number for our office conference line, and I copy the entire office directory onto it as well, since it's good for emergency purposes when you need to track down a specific person."

Besides an extra cell-phone charger (and a USB cable, in case he needs to connect a device to his laptop), Albano also carries a U3-based flash drive, which lets him launch applications directly from the drive. The benefit is that all his computing tasks stay on the drive regardless of the computer he uses, and it allows him to keep information like Firefox bookmarks in one place. Albano also suggests getting a laptop bag with lots of front pockets. "I can pack all my change and metal items in them before I leave for the airport," he says, "and I can access them much easier even in tight spaces, like under an airplane seat." At the airport, he suggests looking for the security line with the most "business-looking" travelers in them. "They do this all the time and know how to move through the line."

adapters include iGo (www.igo.com), Kensington, Targus (www.targus.com), and even luggage-maker Tumi (www.tumi.com). Also, to protect your devices, a travel-size surge protector, such as the Traveler100BT from Tripp Lite (\$19.99, www.tripplite.com) or the \$19.99 Travel Power Outlets from Targus is worth totting along.

If you need more power than your laptop battery can provide, check whether your notebook's manufacturer offers an extended-life battery, or add a portable laptop battery such as one from APC (www.apc.com) or Electrovaya (www.electrovaya.com).



Apple
MacBook Air

electrovaya.com). For \$199, the PowerPad 95 from Electrovaya can increase battery runtime by up to seven hours, and the two USB ports can charge portable devices. The APC Universal Notebook Battery (UPB90), at \$225, is very similar to the PowerPad 95 in features, but has a rated extended battery life of up to eight hours.

A note for fliers: The Department of Transportation passed a mandate at the beginning of the year prohibiting passengers from transporting lithium batteries in their checked baggage.

Before you head to the airport, find out whether any additional batteries you plan to bring along might pose a problem. Some airlines offer a power outlet at your seat, either through an airline adapter you bring along or a standard outlet, so you may not need to bring extra batteries to keep your gear running. Check out Seat Guru (www.seatguru.com) before your next flight. The site details available amenities, such as power outlets, for various airlines.

Traveling by car? Plenty of chargers can take advantage of your car's power port/cigarette lighter. One we like is Kensington's Auto Power Inverter (\$39.99), which converts your car's power port into a 90-watt AC-powered outlet. This means you can plug in your notebook without an adapter. A USB port on the device lets you charge USB-based devices. If you don't want to suck up your car's battery, try Black & Decker's Electromate 400 (\$119.99, www.blackanddecker.com), a portable power station you can store in your trunk.

It provides AC and DC power and, in a pinch, you can use

it to jump-start your car, too.

DOWNSIZING HARDWARE

As a business traveler, you can't afford to be weighed down by your equipment, but that doesn't mean you have to give up the same types of gear that your office desktop features. Whether you're considering mice, Webcams, speakers, or printers, manufacturers are churning out compact products designed to go with you.

In a computer for everyday travel, business travelers might prefer ultraportables, which weigh less than 4 pounds. While we wouldn't have recommended these machines several years ago due to their underpowered performance, recent advancements in processor technology, particularly with Intel's Core 2 Duo and Atom technologies, have increased ultraportable performance and efficiency greatly. In fact, many run everyday programs just fine, and some can even handle demanding apps with ease, rivaling larger notebooks. Plus, weight is an important factor if you'll carry your laptop around airport terminals, hotels, and convention centers. Check out Apple's MacBook Air (starting at \$1,799, www.apple.com), Fujitsu's LifeBook T2010 (starting at \$1,499, www.fujitsu.com), and HP's 2133



APC
Universal
Notebook Battery



Fujitsu
LifeBook
T2010

Traveler's Tip

Cat Schwartz has been traveling a lot lately. Between working as the gadget director for eBay and running her own Web site, HiTechMommy.com, the former on-air host and tech expert on TechTV and G4 has been flying to New York from California to shoot segments for *The Today Show*.

When she flies, Schwartz always carries her bag with her. "Security definitely asks me why I have so many gadgets in my bag," she says, "but if you have lots of valuable



things on you, you have to [put them in a] carry-on." She recommends getting a high-quality bag like the Tumi roller bag she uses, which converts

into a backpack when needed.

On the plane, Schwartz likes using over-the-ear headphones. "I have Plantronics Bluetooth headphones that work beautifully," she says. "Although they're large, they're nicer to have during a six-hour flight than the kind that goes into the ear." Besides her MacBook, Schwartz

carries her iPod for entertainment; she recommends getting an iPod case with a kickstand, which lets you view the player without having to hold it. "If you have an iPod or iPhone and you're going to travel with it as your media player, a case with a kickstand is essential," she says. Schwartz also carries a small portable speaker, the Altec Lansing Orbit-MP3. "It's great for when you're in your hotel room or bathroom, or when you want some sound while you're showering," she says.

Mini-Note PC (\$499, www.hp.com) for three

variations on the ultraportable theme. For a completely business-centric ultraportable, Lenovo's extremely thin and lightweight (and expensive)

ThinkPad X300 (starting at \$2,476, www.lenovo.com) has

you covered.

If you need to print on the road, look at a portable

printer such as Canon's Pixma iP100 (\$249.99, usa.canon.com). Compact and easy to store, the iP100 has a rated print speed of 20 pages per minute for monochrome jobs and 50 seconds for a 4x6-inch color photo. Portable printers can be very expensive, but they're handy if you need to print up documents or contracts at a moment's notice.

Not a fan of the touch pad built into your notebook, but don't like the idea of carrying a large desktop mouse with you? There are plenty of small "notebook" mice around. We like two

models from two of the largest manufacturers of input devices: Logitech and Microsoft. The V550 Nano Cordless Laser Mouse for Notebooks (\$59.99, www.logitech.com) features a "Clip-and-Go" dock that attaches the mouse to the lid of your notebook, making it accessible and easy to stow. And Microsoft's innovative Arc Mouse (\$59.95, www.microsoft.com) has a bottom half that folds

into itself, decreasing the space it occupies in your bag, yet gives you the feel of a desktop-sized mouse. To truly save space, the GoGo Mouse series from Newton

Peripherals (\$69.99 to \$89.99, www.mogostore.com) features thin, card-size input devices that recharge inside your PC Card or ExpressCard slot.

Other desktop-style compact products designed for business travelers include portable hard drives (nearly every company that makes external hard drives offers them, and a 160GB model can now be had for less than \$100), presentation projectors, and even high-definition TV tuners the size of a USB flash drive from companies such as Elgato (www.elgato.com).

Microsoft Arc Mouse



com), Hauppauge (www.hauppauge.com), and Plector (www.plector.com). Regardless of the type of product, there is probably one designed specifically for travel.

SECURING YOUR GEAR

No matter how vigilant you may be, your gear is never 100 percent theft-proof when you're traveling. A few hardware solutions, however, can help.

The first step to securing your gear is to physically lock it down. Most notebook computers include a security slot (also called a "Kensington slot") that lets you attach a notebook lock, which is then secured to an immovable object via a strong cable. These locks, made by Belkin (www.belkin.com), Kensington, Targus, and others, make would-be thieves second-guess about spending the extra time trying to pry the lock off. We like Kensington's new Combo



Kensington ComboSaver



Lenovo ThinkPad X300



Logitech V550 Nano



Canon Pixma iP100

Saver Combination Portable Notebook Lock (\$24.99), which has a 6-foot cable that coils for easy storage in your laptop bag. If you want more theft deterrence, add the Doberman Laptop Defender SE-0210 (around \$30, www.doberman-products.com), a credit-card-size device that sounds an alarm when your laptop is moved.

If you have more than just a laptop to secure, store your belongings inside the PacSafe Couriersafe 100 (\$119.95, www.pacsafe.com), a bag lined with stainless-steel wire to prevent thieves from slicing through it. It features lockable zippers, a



Buffalo MiniStation DataVault

slash-proof, cable-lined shoulder strap, and a built-in combination lock to secure it to a fixed object.

The data on your laptop might be more valuable than the laptop itself. If you are traveling with your company's sensitive information, you should store it on a portable storage device with built-in government-grade encryption. These peripherals have tougher security measures than software-based utilities on your laptop. We like the SanDisk Cruzer Enterprise FIPS Edition (\$87 for 1GB, www.sandisk.com) and the Kingston DataTraveler Blackbox (\$165 for



Maxtor Black Armor



Kingston DataTraveler Blackbox

2GB, www.kingston.com) because they employ the strict FIPS 140-2 encryption standard and fit easily inside a pants pocket. The DataTraveler Blackbox is even waterproof. If you have larger files, check out the 320GB Maxtor Black Armor from Seagate (\$169.99, www.seagate.com) and the MiniStation DataVault from Buffalo (\$129 for 160GB, \$209 for 320GB, www.buffalotech.com). The MiniStation DataVault is compatible with both Windows and Mac OS X. (Both are reviewed on p. 35.)

STAY CONNECTED

Whether you are across town or thousands of miles away, you need to stay connected. Most new laptop computers have built-in connectivity, so whether it's Ethernet or Wi-Fi, you should be covered. If you don't have wireless capability or you want to upgrade to the latest Draft 802.11n protocol, most of the major manufacturers of networking gear, such as Belkin, D-Link (www.dlink.com), Linksys (www.linksys.com), and Netgear (www.netgear.com), offer wireless adapters in

the form of a USB dongle, a PC Card, or an ExpressCard.

If you need to be connected on the Web at all times, consider going cellular. The major cell-phone carriers offer adapters that let you surf the Web on your laptop using high-speed 3G cellular networks, such as EV-DO on Sprint (www.sprint.com) and Verizon (www.verizonwireless.com), and HSDPA/UMTS on AT&T (www.attwireless.com). They won't offer the speeds of an office broadband connection, but these networks are fast enough to get you on the Web when you need it. Some notebook makers offer wireless wide-area network (WWAN) as a built-in feature in some of their products,

so look for it if you're shopping for a laptop for work.

Although you can get Wi-Fi or Ethernet in most places, if you travel off the beaten path, you may find yourself with access to only a telephone landline. If your laptop lacks a traditional modem for a dial-up connection, this could be a problem, so pack USRobotics' 56K USB Modem 5637 (\$49.99, www.usrobotics.com) in your bag just in case. It lets you connect to a landline via a USB port.

Last but certainly not least: Don't forget the need to call home. Consider using Skype (www.skype.com), especially if you are traveling abroad. For \$2.95 a month (United States and Canada), this Voice Over Internet Protocol (VoIP) service lets you call landlines and cell phones via a high-speed Internet connection from your computer or a dedicated Skype device such as the Netgear WiFi Phone. (The WiFi Phone lets you make Skype calls directly, without a computer.)

If you're traveling to Europe, a service called United Mobile (www.united-mobile.com) lets you make calls from your GSM-based cell phone through prepaid SIM cards.



D-Link Xtreme N Dual Band USB Adapter

Safety Procedures

Protect your computer on the road as you would at home. Here are a few simple things the security experts at Trend Micro recommend to help keep your computer safe:

1. Update your computer's Internet security software to protect against malicious programs.
2. Make sure you use a secured and trusted wireless network. Free or open hot spots are not always safe.
3. Use password protection if your computer or device offers it.
4. Don't keep any crucial personal information, such as credit-card numbers, on your hard drive. If you must store such info, consider using an encrypted storage device or the Portable Travel Profile from Critical Access (www.portabletravelprofile.com).
5. If you can, avoid entering any personal information on a public computer—you never know if it contains malicious software.



**COMPUTER
SHOPPER**

"The most powerful
password-management
software we've come across"



Is This Your Password System? Ours is Better!

Amazingly **fast and easy to use**, **RoboForm**
automatically:

- ✓ Remembers your usernames and passwords.
- ✓ Logs you into all your favorite websites.
- ✓ Reduces your many passwords to just one.
- ✓ Increases security and helps protect your identity.
- ✓ Fills long forms and so much more!

We've been saving you time and making your life easier since 1999. More than 26 million downloads, and **over 100 five star ratings** later we are by far the World's #1 Rated Password Manager.

RoboForm has earned prestigious recognition including PC Magazine Editors' Choice, CNET's Best Software of the Year, and PC World's "25 Products We Can't Live Without."

**Computer Shopper Readers
Download RoboForm
for FREE!**

 **RoboForm®**

www.RoboForm.com/CS

HELP & HOW-TO

TIPS AND TRICKS TO MAKE TECH EASIER

COMPUTER CURES JOHN A. BUREK

HAVING A BLAST WITH MEDIA CENTER

I have an HP Pavilion Media Center TV PC. I connected the cable from my DISH Network box to the cable input on the computer. The auto-install detects everything and installs it—up to a point. It keeps stopping and displays a message that it cannot detect the infrared (IR) receiver on the box. I tried to manually set the computer to channel 3 and just use the remote control for the satellite box to change channels. But Media Center still displays the same message. Any ideas? “ALOSTARROW,” VIA THE COMPUTERSHOPPER.COM FORUMS

A recent edition of “Computer Cures” (August issue, p. 89, or www.computershopper.com/howto/computer-cures-200806) discussed the ins and outs of Media Center and that IR receiver, or “blaster”—a small wire and transmitter that runs between the PC and your cable or satellite box. It carries your channel-change commands from the PC to your cable box. The problem you're having is that you must have the blaster plugged in at the PC end, and positioned in front of the satellite box, during the initial Media Center setup process, even if you don't intend to use it later on. Otherwise, the setup routine will not advance.

In the home-theater PCs I've known, the IR blaster has plugged into a jack on the PC or into the back of Microsoft's external USB IR receiver (which picks up the signal from a Media Center remote). You can fool the setup routine by plugging in the blaster wire only temporarily, but I'd urge you to reconsider and try using the blaster whenever you use Media Center for TV viewing. Without it, Media Center's Guide and its program-scheduling and -identification functions—in other words, much of its *raison d'être*—are rendered useless, because the computer will not be in sync with the set-top box.

SPIN MEISTER

I would like to hook a turntable with its own preamp into a Gateway GMS091E Media Center desktop. The turntable doesn't have a USB connector, just RCA plugs. The computer has line-out and line-in ports open, along with center/subwoofer and microphone ports. It also has an IEEE 1394 port I'm not using. How might I hook this turntable into this computer and make it run so I can have some fun? I have some outstanding vinyl LPs I would like to transfer to CDs.

GENE McQUAID, VIA E-MAIL

Use the line-in port as opposed to the microphone, if possible. The physical connection is a simple matter of an inexpensive cable (example: Radioshack catalog number 42-2551 at www.radioshack.com) with two RCA connectors at one end and a stereo mini-jack at the other. Note that some similar cables employ a mono-only mini-jack—look for two rings, not just one, on the jack's tip.

Getting the signal into the PC should be straightforward, especially since your turntable has a preamp built in. For a turntable without a preamp, though, you would want to use as an intermediary a stereo receiver that has a phono input; you would run the cable from the receiver's record-out RCA jacks to the PC's line-in. An alternative to a receiver is a dedicated phono preamp, such as one of the \$30-to-\$50 Translink Cables and Connectors (TCC) models from www.phonopreamps.com.

The reason you need a preamp: Modern-era records are mastered under an equalization scheme known as the “RIAA curve,” which, put simply, assumes that a phono preamp will be present to restore certain frequencies before playing back the signal. If you connect a turntable without a preamp directly to the PC, you'll get faint, inaccurate reproduction of the music. Cer-



tain software packages can compensate for lack of RIAA equalization, but a hardware solution is more effective.

At the software end, loads of commercial and freeware/shareware apps are available that let you capture and edit your audio; our freeware favorite is Audacity (audacity.sourceforge.net). Check out www.computershopper.com/131 for a guide to using Audacity to transfer tapes and LPs to CD.

SOCKET TO ME

I have a Pentium 4 Socket 478 PC and wanted to get a new motherboard. I found this board (MSI 945GM3-F LGA775 Intel 945G Micro ATX); it has a different socket type but says it supports Pentium 4. Should I be looking at the socket type, or at what it supports?

“T101225,” VIA THE COMPUTERSHOPPER.COM FORUMS

Unless you're upgrading the CPU along with the motherboard, you'll need a motherboard that specifically supports Socket 478 processors—that MSI board, which has an LGA775 socket, won't do.

The Pentium 4 processor family made a socket-type shift circa 2004. Older Pentium 4 chips, which abided by the Socket 478 spec, have 478 pins on the chip itself. With the advent of LGA775 (which is still the Intel CPU-interface standard), the pins migrated off the chip and into the motherboard CPU socket. (In this case, the socket, predictably, has 775 of them.) That makes Socket 478 and LGA775 Pentium 4 CPUs physically incompatible.

Alas, you'll see very few new Socket 478 boards, so upgrading both the chip and the CPU makes more sense. You'll also want to check that any new motherboard you

C For more: computersshopper.com/forums

get supports the same type of RAM that your PC has. Certain older Socket 478-era systems employed RDRAM, a memory type that new boards don't support. If you have RDRAM, you may have to buy new DDR or DDR2 memory—though that's probably little hardship, since this RAM is very cheap these days.

6-TO-4, OUT THE DOOR

In Device Manager, I have a pop-up yellow flag on "Microsoft 6-to-4 Adapter." Could you tell me: What is this, and do I need it? I've been getting blue screens lately and was wondering if it had anything to do with it.

STEVE GASPER, VIA E-MAIL

You're not alone. "6-to-4 Adapter" hiccups in Device Manager have been a source of recent annoyance and consternation for many Windows users. The 6-to-4 Adapter has to do with support for IPv6, a next-generation protocol for Internet packet addressing and trafficking that isn't yet in widespread use.

I can't say for certain if the blue screens are related—I doubt it—but you can probably ignore the 6-to-4 Adapter flag if every-

thing else is working. However, try downloading the latest Ethernet driver for your PC, whether the adapter is built-in (check with the motherboard maker) or a card (try the card manufacturer). The driver update may solve the problem.

Failing that, I suggest disabling the 6-to-4 Adapter and watching for any adverse effects. Right-click the item in Device Manager and choose Disable.

RHAPSODY IN BLU-RAY

I know that upgrading a laptop's optical drive is not the easiest task, but I recently noticed that a few companies now sell external drives that play high-definition movies. I have a Dell laptop with a 1080p screen and want to upgrade my drive to a high-definition one, but I am wary of the repercussions. Do you have any advice?

KEN AUKERMAN, VIA E-MAIL

Since Blu-ray is now the de facto standard, I assume you're looking at external Blu-ray drives. There are two sides here to consider: the data aspect and the movie-playback aspect. The ability to burn Blu-ray data discs and movies should not be an issue so long as the laptop meets the mini-

mum specs for whatever Blu-ray-capable burning software you're using. Movie playback, however, requires certain levels of processing and graphics hardware power, which sometimes vary even according to the movie. If your laptop doesn't come up to snuff, there's not much you can do, since laptop CPUs and graphics chipsets are seldom easy to upgrade. A laptop equipped with an internal Blu-ray drive will come with appropriate hardware to enable playback, but an external drive means it's up to you to make that match.

A good first step is to run the free BD Advisor 2 utility from CyberLink (www.cyberlink.com), in the Blu-ray Disc Support section), which establishes your PC's bona fides for Blu-ray movie playback and flags any hardware weak points. You'll also want to compare your laptop's specifications to any published requirements for the bundled Blu-ray playback software (often a version of Corel's WinDVD or CyberLink's PowerDVD).

Also, check whether the drive comes with fully functional software capable of Blu-ray playback. Some bundled software, for example, may play commercial Blu-ray movies but not include full 5.1 playback—just stereo audio—without a pricey upgrade. On a laptop, this may or may not matter to you.

TIP OF THE MONTH: SLIDE "SCANNING"... FOR FREE!

Regarding your May Tip of the Month on copying slides ("Computer Cures," May 2008, p. 87, www.computersshopper.com/howto/computer-cures-200803), I want to share how I copied mine. I borrowed a good slide projector (Kodak Carousel) and photographed the projected pictures. I set up the projector on a small table; directly behind and above it, on a tripod, was my digital camera. I projected my slides on a blank wall in a pitch-black room and photographed each image. At first, I composed each shot because the shape and orientation of each slide was often different. This turned out to be a waste of time because I wound up cropping and enhancing later with Picasa. My suggestion: Photograph each slide as is, setting your camera so the typical image almost fills your camera's LCD.

After moving the images to my computer, I used Google's free Picasa (picasa.google.com) to crop and enhance almost every shot. Many pictures were underexposed, and I was



surprised to find more people's faces in the shots after changing the auto-contrast or fill-lighting settings. The results were astounding! Another terrific aid is Picasa's "I'm feeling lucky" button—many times this was the only change I made. When done, I burned the cleaned photos to CDs and mailed them to family members.

STEVEN SHAPIRO, SR.

Although a moderate-cost slide scanner would give you better results, it's a several-hundred-dollar investment that will likely

gather dust after you've digitized the slides you have. That's why I like this tip: The image quality won't be all it could be, but it would be a far greater crime to allow your slides to go unshared.

Send us your favorite tip, and you could receive a year's subscription to *Computer Shopper*!

"Computer Cures," *Computer Shopper*, 72 Madison Ave., 10th Fl., New York, NY 10016
computer.cures@computersshopper.com

Please include your name. Due to the number of letters we receive, we cannot provide personal replies, nor return any enclosures.

FIND WINNING HP PRODUCTS AT COMPSOURCE.COM



HP LASERJET MULTIFUNCTION PRINTER

- 24 PPM MONO
- 600 X 600 DPI
- FAX, COPIER, SCANNER, PRINTER

ONLY \$299

LIST PRICE \$509

M# CB534A#ABA



WE LISTEN TO YOUR NEEDS AND PROFESSIONALLY DELIVER SOLUTIONS WITHIN YOUR BUDGET.

\$294 M#D70PES125B	DIAMOND RADEON HD 4870 512MB	VERSUS	EVGA GEFORCE GTX 280 1024MB	\$469 M#D70PES125B
\$279 M#D70PES125B	REAPER 4GB KIT DDR3 PC3-12800	VERSUS	KINGSTON HYPERX 4GB DDR2 SDRAM	\$126 M#D70PES125B
\$257 M#D70PES125B	ASUS ATX AM2+ NFORCE 780A SLI	VERSUS	EVGA NFORCE 790I ULTRA SLI	\$335 M#D70PES125B
\$236 M#D70PES125B	Thermaltake ARMOR PLUS CASE SILVER 10 PCI SLOTS DESIGN FOR QUAD-GRAPHIC CARD & 2X USB 2.0 1X IEEE 1394, 1X HD AUDIO, E-SATA CONNECTOR X2	VERSUS	Antec ULTIMATE GAMING CASE 12 DRIVE BAYS, 7 EXPANSION SLOTS, 2X USB 2.0 1X E-SATA • HD AUDIO IN AND OUT	\$168 M#D70PES125B

COMPSOURCE CAN CUSTOM BUILD AN UNBEATABLE SYSTEM THAT WON'T KNOCKOUT YOUR WALLET.

HP COLOR LASERJET CP4005N

WITH 18-SPEED USB, 10/100BASE-TX



ONLY \$859

LIST PRICE \$1368

M# CB534A#ABA



HP LASERJET P4014

45 PPM 110V/DC/CHROME & 1200 DPI



ONLY \$709

LIST PRICE \$1043

M# CB534A#ABA



HP LASERJET M3035

1200 DPI • COPIER, SCANNER, PRINTER



ONLY \$1389

LIST PRICE \$2349

M# CB534A#ABA



Copyright © 1999 - 2008 CompSource, Inc. is not responsible for data, typographical or technical errors. Price is include a instant rebate, some prices are only good till 10/31/08. All rights reserved.



VISIT: COMPSOURCE.COM OR CALL: 1.888.COMPSOURCE (888-266-7768)

WEEKEND PROJECT


Swap in a healthy, roomy new drive in five easy steps.

Replace Your Laptop's Hard Drive

BY JOHN R. DELANEY



NOT LONG AGO, replacing your laptop's hard drive meant packing up the system and shipping it back to its maker, or dropping it off with a local repair shop. Either way, you'd have to live without your computing companion for some time, and depending on who was doing the work, you'd likely pay plenty. Fortunately, most of today's notebooks allow easy access to their hard drives. Here's all you need to know about replacing your notebook drive without incurring tech-separation anxiety—or a big bill.

 For more: computershopper.com/howto

Choose your drive well

The standard drives in modern laptops—excepting a few of the very slimmest ultraportables—conform to the 2.5-inch-wide hard drive form factor. Most laptop upgrade drives sold today are 2.5-inch and rotate at 4,200rpm, 5,400rpm, or 7,200rpm, offering capacities of 100GB or more. All else being equal, the faster the spin rate, the better the performance you should expect.

Drive prices vary depending on storage capacity, rotational speed, transfer rate, and the amount of buffer memory (cache). For example, a Seagate 200GB drive that spins at 7,200rpm and has a 3 gigabyte (Gb) per second maximum transfer rate and 16MB of cache will cost around \$150, whereas a slower (5,400rpm) 250GB drive with a 1.5Gb-per-second top transfer speed and an 8MB cache can be had for under \$100. If sheer storage space is what you're after, great deals abound on high-capacity drives that spin at 4,200rpm or 5,400rpm, whereas top-of-the-line, high-performance drives cost more and tend to offer extra features such as encryption and enhanced shock protection.

Ideally, your new hard drive will be faster and hold more data than its predecessor, but its most crucial parameter is whether it's compatible with your laptop's drive controller. Serial ATA (SATA) and Ultra ATA/IDE are the typical interfaces used in laptop systems. A typical ATA/IDE 2.5-inch laptop drive has a 44-pin edge connector and four jumper pins (resembling a desktop IDE drive), while SATA drives employ SATA-standard slot-style connectors. Some laptops employ a proprietary pin connector that connects the drive to the controller. Usually, this connector is mounted on the drive caddy (a carrier that inserts in the laptop's hard drive bay) or attaches directly to the drive's pins; either way, the connector must be detached from the old drive and connected to the new one.

A third possibility: Your old drive may employ a different type of connector—a ZIF connector—built into the drive itself. If yours does, make sure your new drive has the same type of connector. Another option is to purchase a converter that supports the interfaces on your drive and laptop, but your best bet is to match your new drive's interface directly to the one used by your laptop, particularly if you're dealing with tight spaces. The extra bulk or length added by a converter may prevent the drive from fitting properly.



Different drives use different kinds of connection mechanisms; make sure you know which you need before you begin.

Note that the overall thickness of your new hard drive may determine if it will fit into your system. You'll almost certainly be replacing a 2.5-inch-wide drive with another 2.5-inch drive, but thicknesses can vary among these drives, so make sure you don't purchase one that's thicker than the original—it may not fit properly. If you're unsure of your old drive's measurements, check the specifications online, using the model number of the drive.

Most online sellers of laptop upgrade drives provide a drive-compatibility chart that lists nearly every popular laptop model out there and which drives will work with them, so be sure to do a little research before making your purchase.

2 Back up your files

There are a variety of ways to transfer files from your old drive (assuming it still works) to the new drive. Using software such as Genie Backup Manager Pro or NTI's Backup Now to back up and restore your files makes sense if you already own an external drive. Another

possibility: You can simply copy your data to blank CD or DVD media or to a portable USB or external Serial ATA

(eSATA) storage device, but—depending on the type and amount of data involved—this can be time consuming.

If you don't own an external hard drive, consider using an online service such as MozyHome Online Backup (www.mozy.com) to archive and store your data until the new drive is installed. (We recommend this only for relatively small amounts of data, since uploading can take a while.) The easiest way to get back up and running without having to reinstall your operating system and applications is to use a drive-imaging program such as ShadowProtect Desktop 3.2 (www.storagecraft.com) to transfer the entire contents of your old drive, including the operating system and your personal system settings, to the newly installed drive. Again, though, you'll need external storage to use as an intermediary.

Another option: The \$49 USB 2.0 Data Transfer Kit from CMS Products (www.cmsproducts.com) is a USB-based system comprising software and an empty external drive case. You install your upgrade drive into the case and duplicate the contents of your old drive straight to the new one. You then swap the drives; the new drive in your laptop now contains your complete OS, data, and apps, and, as a bonus, you can use the old drive in the enclosure as an external backup unit.



You may need to use a jeweler's screwdriver to remove the bottom panel of your laptop and locate your hard drive.

3 Remove your old drive

A laptop hard drive is usually easy to remove or install—the process requires nothing more than a set of jeweler's screwdrivers, a well-lit workspace, and a user's manual.

Before doing anything else, unplug the laptop and remove the battery to avoid potential damage to the motherboard (and yourself). Turn the laptop upside down, and look for a removable panel or a hard drive release mechanism. Laptop drives are usually accessible from the bottom or side of the chassis. Typically, you release the drive by flicking a lock/unlock button and/or removing a screw that holds the drive in place.

If you're unsure how to physically remove the drive, refer to your user's manual or visit the vendor's Web site for detailed instructions. Also, check out user forums online for discussions about your brand of laptop. Message boards often hold a wealth of firsthand reports.

Once the old drive has been removed from the chassis, you may have to extract it from a caddy or detach a set of mounting rails from its sides. If so, attach the rails or caddy to the new drive right away to keep the screws and washers from getting lost. If a connector is attached to the old drive's signal pins, remove it and snap it onto the new drive. If you feel resistance, do not force it; you may have it upside down. Damaging the signal pins may render the drive useless.

Keep a variety of sizes of jeweler's screwdrivers on hand for this job.



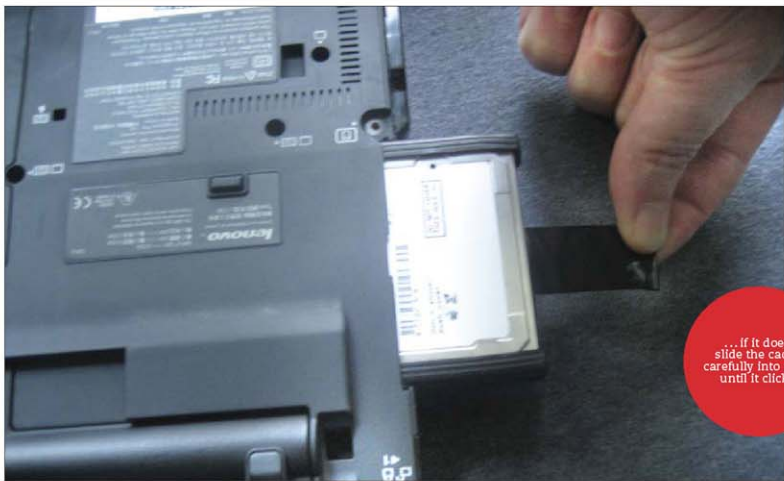
4

Install your new drive

Next, install the drive in the laptop in the reverse of the manner that the old drive was removed. If it's a slide-in drive on a caddy, it should slide smoothly into the drive slot and produce a faint click when the connectors engage. If the drive sits flush into a panel on the bottom of the laptop, you may have to insert one edge first (usually the edge with the interface connector) to produce a snug fit. Again, if you feel resistance, or if the drive doesn't fit properly, take it out and try again. Never force it (or any component) into place. Look for obstructions, and make sure the caddy or rails are installed correctly and that all retaining screws are tight and flush. Once the drive is installed, secure it with any screws you removed earlier and slide the locking mechanism (if any) into the locked position.



Your laptop may use a caddy to secure the hard drive...



...If it does, slide the caddy carefully into place until it clicks.

5

Configure the new drive

When you power up the notebook, the system BIOS should automatically recognize the new drive. If you created a bootable backup disc or a complete image disc, place it in the optical drive and follow the application's instructions for restoring your data. You may have to update a driver or two, but you should otherwise be ready to go. If you are performing a clean Windows installation, use the original OS disc and have your CD key code handy. Follow the formatting and partitioning instructions, and load the operating system. Once the OS installation is complete, you can begin installing your applications and any necessary drivers. Then copy over any data you've stored on external drives or discs—and enjoy your companion's new storage horizons right away.

Build Your Own



NEW PRODUCTS FOR BUILDING A CUSTOM PC | BY JOHN A. BUREK



Serious spin control

Snazz up your new PC build's case—and keep fan noise down—with AeroCool.US's **Modern-V**. This drive-bay device occupies two 5.25-inch bays with a big, attractive LCD readout that displays temperature and fan-speed information alongside an eye-catching system schematic. You can set fan and temperature controls on automatic or manual settings, as well as turn the LCD backlighting on or off as desired. Cost for this deluxe controller: around \$60.

AeroCool.US, www.aerocool.us

Blaze of glory

Pushing an Nvidia-based graphics card to the limit? Keep one eye on your temperature readout and the other on Spire's **SilverBlaze Video Graphics Array Cooler**. An add-on cooling device for most recent-model GeForce cards, the SilverBlaze mounts onto your card, in place of its old fan or heat sink, using a backing plate and four nuts. A big 80mm, 2,000rpm fan with 11 blades keeps your GPU cool yet spins quietly. A tube of thermal paste comes in the box. Pricing was not set at press time. Spire, www.spirecoolers.com



Temple of Nvidia

If you're building a big-league Nvidia-based gaming rig and want everyone to know it, the **T110 Nvidia Edition** is the "display case" du jour to get. This aluminum-bodied case is certified for up to three-card Scalable Link Interface (SLI) graphics, and envious onlookers will be able to see your handful of cards through a transparent side panel. Five green-LED fans maintain plenty of airflow, and slide-out drive cages, snap-in fan brackets, and a flip-up top port panel all contribute to ease of use and upgrading. With 11 drive bays and room even for the biggest motherboards on the market (Extended ATX), you get lots of building room for your \$340. SilverStone Technology, www.silverstonetek.com

For more: computershopper.com/build-your-own

BUILD YOUR OWN

Big aluminum

The **GS1000** midrange gaming case from Zalman is ogle-worthy if you're assembling a full-featured tower of power. The aluminum-exterior ATX case comes with black or silver side panels, but most of this imposing enclosure's beauty is inside. Three of the 3.5-inch bays, hidden behind a flip-down door, let you hot-swap hard drives; an optional circuit board accommodates three additional hot-swappable. Power-supply installation is a cinch: Instead of wedging it in through the side, you roll the supply into place through the back of the case. And count on loads of cooling potential—space for five 120mm fans (including two bottom-mounted ones) and hose ports for external liquid cooling. Plus, rubber-edged cut-aways for cable routing help keep the interior neat. Expect to pay around \$169. *Zalman Tech, www.zalmanusa.com*



Strong, silent type

The 550-watt **Fusion 550R** power-supply unit (PSU) from Arctic Cooling brings a whole basket of "silent" and "efficient" to the PC-build party. With a dual-12-volt-rail design, a soft-mounted 80mm fan engineered for low noise, and an 82 percent to 86 percent efficiency rating, this ATX-form-factor PSU comes equipped to perform low-key power pushing. Plus, this \$94.95 unit is moderately priced and comes with the requisite six- and eight-pin power connectors to support CrossFire or SLI graphics. *Arctic Cooling, www.arctic-cooling.com*

Driving ranger

Want to install more internal hard drives than your case can currently handle? Check out the **Hard Disk Stabilizer x4** from Scythe. This frame kit helps you convert three adjacent 5.25-inch drive bays into four 3.5-inch hard drive bays. It also isolates the drives from your PC's chassis using six vibration-reducing screws for quieter operation. Construction is steel and rubber; price is about \$11. *Scythe U.S.A., www.scythe-usa.com*





At Home In The Digital Environment

With wider broadband adoption, more digital products and easier setup, the networked home market is primed for double-digit growth. From routers to home theater, computing to whole-house remotes, the best in security, productivity and entertainment converge at the International CES®. If you connect with only one show in 2009, make it CES. It's the trade-only event that shapes the digital environment. Register now at CESweb.org.

JANUARY 8-11, 2009
THURSDAY-SUNDAY
LAS VEGAS, NEVADA
www.CESweb.org



AUDIO



DIGITAL
IMAGING



EMERGING
TECHNOLOGY



GAMING



HIGH-PERFORMANCE
AUDIO & HOME THEATER



HOME
NETWORKING



HOME
THEATER VIDEO



IN-VEHICLE
TECHNOLOGY



WIRELESS

2009 International
CES

WHERE ENTERTAINMENT, TECHNOLOGY
 AND BUSINESS CONVERGE

PRODUCED BY
CEA

The Right Multifunction Printer

BY SERGUEI SERVIANOV



Samsung
SCX-4500

Multifunction printers (MFPs) combine a copier, a scanner, a printer—and, sometimes, a fax machine—into one device, making them ideal for a home office or a small business. Here's how to find the right one for you.

G For more: computershopper.com/buying-guides

SHOPPING SPECS

LASER VERSUS INKJET

MFPs are available in laser or inkjet versions. Laser MFPs are more expensive, but they offer sharper text and faster print speeds; you can choose between budget-friendly monochrome lasers and pricier color laser models. Inkjet MFPs, on the other hand, offer color printing for much less money, though they can't compete with lasers when it comes to text-printing quality and operating costs.

BUSINESS FEATURES

For a small-business setup, look for MFPs that offer built-in wireless networking, so that multiple PCs can share one device. If you're scanning, copying, or faxing large numbers of documents, choose a unit that offers optional paper trays and an automatic document feeder (ADF).

PHOTO-PRINTING CAPABILITIES

If you need your MFP to output digital photos, look for inkjet models with built-in memory-card slots or a Pict-Bridge port. These features let you print directly from a camera or its memory card, without using a PC. Some MFPs offer a built-in LCD that lets you preview and edit shots before printing.

3 GREAT BUYS

GOOD

Epson Stylus CX8400
(www.epson.com, \$99.99)
The CX8400 isn't perfect, but considering its low price, this color inkjet MFP churns out good-quality text documents and sharp photos. Its individual ink tanks are cheaper in the long run, and the pigment inks they come with will help ensure your printed photos last for years.

BETTER

Canon Pixma MX700 ✓
(usa.canon.com, \$179.99)
The only downside to this remarkable inkjet MFP is its slow print speed, particularly with photos. Otherwise, the MX700 provides excellent print and copy quality, and it offers useful small-office features such as faxing, Ethernet networking, and an ADF.

BEST

Samsung SCX-4500
(www.samsung.com, \$349.99)
Looking like a black slab of alien granite, the SCX-4500 monochrome laser all-in-one is easy to set up and use. Great print quality, quiet operation, and quick startup make this unit a highly functional—and stylish—item for your home office.

ABE'S
SINCE 1979! CAMERAS AND ELECTRONICS OF MAINE
6 FERNWOOD AVE, RARITAN CENTER, EDISON, NJ 08837

CELEBRATING OVER 25 YEARS IN BUSINESS

FAX 1-718-228-8727



1-800-960-2237

CALL TOLL FREE

OPEN SUNDAY

OPEN HOURS

Mon.-Thurs. 9:30AM-10:30PM
Fri. 9:30AM-4:00PM
Saturday 10:00AM-7:00PM
Sunday 10:00AM-7:00PM

or 718-645-1818

UNFINISHED FROM OLD OCCASION
SEARCH, MAINE

Shows and Supplies can now be 10-Minute 10 to 15-Minute 10 to 15-Minute 10 to 15-Minute

NEVERMORE
SPEAKING

ALL MERCHANDISE IS BRAND NEW & FACTORY FRESH!

www.abesofmaine.com
DIGITAL CAMERAS

NIKON D80 DIGITAL SLR
W/18-135MM LENS
+ 10.2 Megapixel Digital SLR
+ 11 Area AF System
+ High Sensitivity with Noise Reduction
+ 3D Color Matrix II

New Low Price!

NIKON COOLPIX S210
NEW!
+ 8.0 Megapixel Digital
+ 3X Optical Zoom
+ Electronic VR Image Stabilization
+ 2.7" LCD Screen

\$149.99

NIKON DIGITAL CAMERAS

2070	NEW	Coolpix S210	NEW
2080	NEW	Coolpix S210	NEW
2090	NEW	Coolpix S210	NEW
2100	NEW	Coolpix S210	NEW
2110	NEW	Coolpix S210	NEW
2120	NEW	Coolpix S210	NEW
2130	NEW	Coolpix S210	NEW
2140	NEW	Coolpix S210	NEW
2150	NEW	Coolpix S210	NEW
2160	NEW	Coolpix S210	NEW
2170	NEW	Coolpix S210	NEW
2180	NEW	Coolpix S210	NEW
2190	NEW	Coolpix S210	NEW
2200	NEW	Coolpix S210	NEW
2210	NEW	Coolpix S210	NEW
2220	NEW	Coolpix S210	NEW
2230	NEW	Coolpix S210	NEW
2240	NEW	Coolpix S210	NEW
2250	NEW	Coolpix S210	NEW
2260	NEW	Coolpix S210	NEW
2270	NEW	Coolpix S210	NEW
2280	NEW	Coolpix S210	NEW
2290	NEW	Coolpix S210	NEW
2300	NEW	Coolpix S210	NEW
2310	NEW	Coolpix S210	NEW
2320	NEW	Coolpix S210	NEW
2330	NEW	Coolpix S210	NEW
2340	NEW	Coolpix S210	NEW
2350	NEW	Coolpix S210	NEW
2360	NEW	Coolpix S210	NEW
2370	NEW	Coolpix S210	NEW
2380	NEW	Coolpix S210	NEW
2390	NEW	Coolpix S210	NEW
2400	NEW	Coolpix S210	NEW
2410	NEW	Coolpix S210	NEW
2420	NEW	Coolpix S210	NEW
2430	NEW	Coolpix S210	NEW
2440	NEW	Coolpix S210	NEW
2450	NEW	Coolpix S210	NEW
2460	NEW	Coolpix S210	NEW
2470	NEW	Coolpix S210	NEW
2480	NEW	Coolpix S210	NEW
2490	NEW	Coolpix S210	NEW
2500	NEW	Coolpix S210	NEW
2510	NEW	Coolpix S210	NEW
2520	NEW	Coolpix S210	NEW
2530	NEW	Coolpix S210	NEW
2540	NEW	Coolpix S210	NEW
2550	NEW	Coolpix S210	NEW
2560	NEW	Coolpix S210	NEW
2570	NEW	Coolpix S210	NEW
2580	NEW	Coolpix S210	NEW
2590	NEW	Coolpix S210	NEW
2600	NEW	Coolpix S210	NEW
2610	NEW	Coolpix S210	NEW
2620	NEW	Coolpix S210	NEW
2630	NEW	Coolpix S210	NEW
2640	NEW	Coolpix S210	NEW
2650	NEW	Coolpix S210	NEW
2660	NEW	Coolpix S210	NEW
2670	NEW	Coolpix S210	NEW
2680	NEW	Coolpix S210	NEW
2690	NEW	Coolpix S210	NEW
2700	NEW	Coolpix S210	NEW
2710	NEW	Coolpix S210	NEW
2720	NEW	Coolpix S210	NEW
2730	NEW	Coolpix S210	NEW
2740	NEW	Coolpix S210	NEW
2750	NEW	Coolpix S210	NEW
2760	NEW	Coolpix S210	NEW
2770	NEW	Coolpix S210	NEW
2780	NEW	Coolpix S210	NEW
2790	NEW	Coolpix S210	NEW
2800	NEW	Coolpix S210	NEW
2810	NEW	Coolpix S210	NEW
2820	NEW	Coolpix S210	NEW
2830	NEW	Coolpix S210	NEW
2840	NEW	Coolpix S210	NEW
2850	NEW	Coolpix S210	NEW
2860	NEW	Coolpix S210	NEW
2870	NEW	Coolpix S210	NEW
2880	NEW	Coolpix S210	NEW
2890	NEW	Coolpix S210	NEW
2900	NEW	Coolpix S210	NEW
2910	NEW	Coolpix S210	NEW
2920	NEW	Coolpix S210	NEW
2930	NEW	Coolpix S210	NEW
2940	NEW	Coolpix S210	NEW
2950	NEW	Coolpix S210	NEW
2960	NEW	Coolpix S210	NEW
2970	NEW	Coolpix S210	NEW
2980	NEW	Coolpix S210	NEW
2990	NEW	Coolpix S210	NEW
3000	NEW	Coolpix S210	NEW
3010	NEW	Coolpix S210	NEW
3020	NEW	Coolpix S210	NEW
3030	NEW	Coolpix S210	NEW
3040	NEW	Coolpix S210	NEW
3050	NEW	Coolpix S210	NEW
3060	NEW	Coolpix S210	NEW
3070	NEW	Coolpix S210	NEW
3080	NEW	Coolpix S210	NEW
3090	NEW	Coolpix S210	NEW
3100	NEW	Coolpix S210	NEW
3110	NEW	Coolpix S210	NEW
3120	NEW	Coolpix S210	NEW
3130	NEW	Coolpix S210	NEW
3140	NEW	Coolpix S210	NEW
3150	NEW	Coolpix S210	NEW
3160	NEW	Coolpix S210	NEW
3170	NEW	Coolpix S210	NEW
3180	NEW	Coolpix S210	NEW
3190	NEW	Coolpix S210	NEW
3200	NEW	Coolpix S210	NEW
3210	NEW	Coolpix S210	NEW
3220	NEW	Coolpix S210	NEW
3230	NEW	Coolpix S210	NEW
3240	NEW	Coolpix S210	NEW
3250	NEW	Coolpix S210	NEW
3260	NEW	Coolpix S210	NEW
3270	NEW	Coolpix S210	NEW
3280	NEW	Coolpix S210	NEW
3290	NEW	Coolpix S210	NEW
3300	NEW	Coolpix S210	NEW
3310	NEW	Coolpix S210	NEW
3320	NEW	Coolpix S210	NEW
3330	NEW	Coolpix S210	NEW
3340	NEW	Coolpix S210	NEW
3350	NEW	Coolpix S210	NEW
3360	NEW	Coolpix S210	NEW
3370	NEW	Coolpix S210	NEW
3380	NEW	Coolpix S210	NEW
3390	NEW	Coolpix S210	NEW
3400	NEW	Coolpix S210	NEW
3410	NEW	Coolpix S210	NEW
3420	NEW	Coolpix S210	NEW
3430	NEW	Coolpix S210	NEW
3440	NEW	Coolpix S210	NEW
3450	NEW	Coolpix S210	NEW
3460	NEW	Coolpix S210	NEW
3470	NEW	Coolpix S210	NEW
3480	NEW	Coolpix S210	NEW
3490	NEW	Coolpix S210	NEW
3500	NEW	Coolpix S210	NEW
3510	NEW	Coolpix S210	NEW
3520	NEW	Coolpix S210	NEW
3530	NEW	Coolpix S210	NEW
3540	NEW	Coolpix S210	NEW
3550	NEW	Coolpix S210	NEW
3560	NEW	Coolpix S210	NEW
3570	NEW	Coolpix S210	NEW
3580	NEW	Coolpix S210	NEW
3590	NEW	Coolpix S210	NEW
3600	NEW	Coolpix S210	NEW
3610	NEW	Coolpix S210	NEW
3620	NEW	Coolpix S210	NEW
3630	NEW	Coolpix S210	NEW
3640	NEW	Coolpix S210	NEW
3650	NEW	Coolpix S210	NEW
3660	NEW	Coolpix S210	NEW
3670	NEW	Coolpix S210	NEW
3680	NEW	Coolpix S210	NEW
3690	NEW	Coolpix S210	NEW
3700	NEW	Coolpix S210	NEW
3710	NEW	Coolpix S210	NEW
3720	NEW	Coolpix S210	NEW
3730	NEW	Coolpix S210	NEW
3740	NEW	Coolpix S210	NEW
3750	NEW	Coolpix S210	NEW
3760	NEW	Coolpix S210	NEW
3770	NEW	Coolpix S210	NEW
3780	NEW	Coolpix S210	NEW
3790	NEW	Coolpix S210	NEW
3800	NEW	Coolpix S210	NEW
3810	NEW	Coolpix S210	NEW
3820	NEW	Coolpix S210	NEW
3830	NEW	Coolpix S210	NEW
3840	NEW	Coolpix S210	NEW
3850	NEW	Coolpix S210	NEW
3860	NEW	Coolpix S210	NEW
3870	NEW	Coolpix S210	NEW
3880	NEW	Coolpix S210	NEW
3890	NEW	Coolpix S210	NEW
3900	NEW	Coolpix S210	NEW
3910	NEW	Coolpix S210	NEW
3920	NEW	Coolpix S210	NEW
3930	NEW	Coolpix S210	NEW
3940	NEW	Coolpix S210	NEW
3950	NEW	Coolpix S210	NEW
3960	NEW	Coolpix S210	NEW
3970	NEW	Coolpix S210	NEW
3980	NEW	Coolpix S210	NEW
3990	NEW	Coolpix S210	NEW
4000	NEW	Coolpix S210	NEW
4010	NEW	Coolpix S210	NEW
4020	NEW	Coolpix S210	NEW
4030	NEW	Coolpix S210	NEW
4040	NEW	Coolpix S210	NEW
4050	NEW	Coolpix S210	NEW
4060	NEW	Coolpix S210	NEW
4070	NEW	Coolpix S210	NEW
4080	NEW	Coolpix S210	NEW
4090	NEW	Coolpix S210	NEW
4100	NEW	Coolpix S210	NEW
4110	NEW	Coolpix S210	NEW
4120	NEW	Coolpix S210	NEW
4130	NEW	Coolpix S210	NEW
4140	NEW	Coolpix S210	NEW
4150	NEW	Coolpix S210	NEW
4160	NEW	Coolpix S210	NEW
4170	NEW	Coolpix S210	NEW
4180	NEW	Coolpix S210	NEW
4190	NEW	Coolpix S210	NEW
4200	NEW	Coolpix S210	NEW
4210	NEW	Coolpix S210	NEW
4220	NEW	Coolpix S210	NEW
4230	NEW	Coolpix S210	NEW
4240	NEW	Coolpix S210	NEW
4250	NEW	Coolpix S210	NEW
4260	NEW	Coolpix S210	NEW
4270	NEW	Coolpix S210	NEW
4280	NEW	Coolpix S210	NEW
4290	NEW	Coolpix S210	NEW
4300	NEW	Coolpix S210	NEW
4310	NEW	Coolpix S210	NEW
4320	NEW	Coolpix S210	NEW
4330	NEW	Coolpix S210	NEW
4340	NEW	Coolpix S210	NEW
4350	NEW	Coolpix S210	NEW
4360	NEW	Coolpix S210	NEW
4370	NEW	Coolpix S210	NEW
4380	NEW	Coolpix S210	NEW
4390	NEW	Coolpix S210	NEW
4400	NEW	Coolpix S210	NEW
4410	NEW	Coolpix S210	NEW
4420	NEW	Coolpix S210	NEW
4430	NEW	Coolpix S210	NEW
4440	NEW	Coolpix S210	NEW
4450	NEW	Coolpix S210	NEW
4460	NEW	Coolpix S210	NEW
4470	NEW	Coolpix S210	NEW
4480	NEW	Coolpix S210	NEW
4490	NEW	Coolpix S210	NEW
4500	NEW	Coolpix S210	NEW
4510	NEW	Coolpix S210	NEW
4520	NEW	Coolpix S210	NEW
4530	NEW	Coolpix S210	NEW
4540	NEW	Coolpix S210	NEW
4550	NEW	Coolpix S210	NEW
4560	NEW	Coolpix S210	NEW
4570	NEW	Coolpix S210	NEW
4580	NEW	Coolpix S210	NEW
4590	NEW	Coolpix S210	NEW
4600	NEW	Coolpix S210	NEW
4610	NEW	Coolpix S210	NEW
4620	NEW	Coolpix S210	NEW
4630	NEW	Coolpix S210	NEW
4640	NEW	Coolpix S210	NEW
4650	NEW	Coolpix S210	NEW
4660	NEW	Coolpix S210	NEW
4670	NEW	Coolpix S210	NEW

Your solution for
limited space

STAPLES

that was easy:

You can purchase these and other styles at
www.staples.com

Keyword Search "Techni Mobil" or use item code.


TECHNI
MOBIL

Our products are constructed
with premium MDF Panels,
Powder Coated Steel Frames,
Laminated PVC Surfaces and
backed with a five year warranty.


RTA
PRODUCTS=LLC

3900 Executive Way
Miramar, FL 33025
Toll Free: 866.782.8262
Fax: 954.499.2289
E-mail: info@rtaproducts.com
www.rtaproducts.com



He was a hardworking farm boy.

She was an Italian supermodel.

He knew he would have just
one chance to impress her.

Rosetta Stone. The fastest and
easiest way to learn **ITALIAN**.

Only Rosetta Stone® uses **Dynamic Immersion®** to teach you a language quickly and efficiently without tedious translation, mindless memorization and boring grammar drills. It's the world's leading language-learning software.

- You'll experience **Dynamic Immersion** as you match real-world images to words spoken by native speakers so you'll find yourself engaged, and learn your second language like you learned your first... for a faster, easier way to learn.
- Our proprietary **Speech Recognition Technology** evaluates your speech and coaches you on more accurate pronunciation. You'll speak naturally.
- And only Rosetta Stone has **Adaptive Recall™**, that brings back material to help you where you need it most, for more effective progress.

Plus, Rosetta Stone now offers **Audio Companion™** to help you make even faster progress. Simply download the CDs to your audio or MP3 player and use Rosetta Stone on-the-go!

Get Rosetta Stone—**The Fastest Way to Learn a Language. Guaranteed®**



31 Languages Available

SAVE 10%!
100% GUARANTEED
SIX-MONTH MONEY-BACK

Level 1	Reg. \$219	NOW \$197
Level 1&2	Reg. \$359	NOW \$323
Level 1,2&3	Reg. \$499	NOW \$449

©2008 Rosetta Stone Ltd. All rights reserved. Patent rights pending. Prices are subject to change without notice. The Month Money Back offer is limited to product purchases made directly from Rosetta Stone and does not include return shipping. This offer does not apply to Rosetta Stone Online or Audio Companion™ purchased separately from the software product. All sales are included with the product at the time of purchase must be returned together and undamaged to be eligible for any exchange or refund.

Call
(866) 267-7050

Online
RosettaStone.com/css118

Use promotional code **css118** when ordering.
Offer expires February 28, 2009.

RosettaStone®


AD INDEX

1 & 1.....	land1.com	8, 9
Abe's of Maine.....	www.abesofmaine.com	99
ABS.....	www.abs.com	83
AMD.....	www.amd.com	38, 39
American Power Conversion.....	www.apc.com/promo	13 - 15, 23
Buffalo Technology.....	www.buffalotech.com	7
CES.....	www.cesweb.org	97
Chieftec.....	www.chieftec.com	59
Compsource.....	compsource.com	91
Cyberpower, Inc.....	www.cyberpowerpc.com	45, 51
HP.....	hp.com/go/hpwireless	2
HP.....	hp.com/servers/rethink4	10
iBUYPOWER.....	www.ibuypower.com	47 - 49
Intel.....	www.intel.com/go/shopcentrino	27, 28
Intel.....	intel.com/go/centrino	31
Kaplan University.....	itundergrad.kaplan.edu	57
LG Electronics.....	www.lgusa.com/lg70	Cov. 4
Provantage.....	provantage.com	25
Roboform.....	www.roboform.com/cs	88
Sager.....	sagernotebook.com	Cov. 2, 1
Santa Fe Natural Tobacco Company.....	www.tryamericanspirit.com	41, 42
Thermaltake.....	www.thermaltakeusa.com	Cov. 3
Toshiba.....	explore.toshiba.com/cs	4
Trendnet.....	www.trendnet.com	37
Vigor Gaming.....	www.vigorgaming.com	60
Wacom.....	www.bamboopentablet.com	53
Xtreme Gear.....	www.buyxg.com	54
ZT Systems.....	www.ztsystems.com/computershopper	81

All advertising is subject to Publisher's approval and acceptance without recourse. The advertising herein that is typeset and/or designed by *Computer Shopper* is the property of *Computer Shopper* and not that of the advertiser. The advertiser has purchased the right of reproduction in *Computer Shopper* only and does not have the right to reproduce the ad in any other place of publication. We are not responsible for mistakes, misprints, or typographical errors and will not issue credits of any kind for such errors. Advertisers and their agencies assume responsibility for the condition of the contents of advertising printed, and agree to indemnify the Publisher of *Computer Shopper* for any and all claims and expenses arising therefrom. *Computer Shopper* standards suggest to the advertiser that statements concerning shipping and handling charges, warranties, and money- or no money-back guarantees should be stated in all forms of advertising within *Computer Shopper*. The opinions expressed in the articles, columns, and ads are those of the writer and not necessarily those of *Computer Shopper*.

Computer Shopper
72 Madison Ave., 10th FL
New York, NY 10016

Sales Info: 800-999-7457
Editorial: 917-326-8700
Fax: 212-481-0920
Customer Service: 877-214-7390



Canon®
Compatible
No. 8 Cartridges

AS LOW AS
\$4.69
*Requires Chip



Remanufactured
DELL™ M4640
Ink Cartridges

AS LOW AS
\$21.59

WOW!

1-800-INKFARM
inkfarm.com
the ink & toner supersite™

COMPUTER SHOPPER

www.computershopper.com

What are... Anti-Aliasing & Anisotropic Filtering?

If you play 3D games on a desktop like the iBuypower Gamer Fire 294 (see p. 24) or on a laptop like those in this month's gaming-portable roundup (see p. 76), you've probably seen these terms in the graphics settings. Sure, you know you can turn them up to make the game look better, or down so it plays faster. But what do they mean?

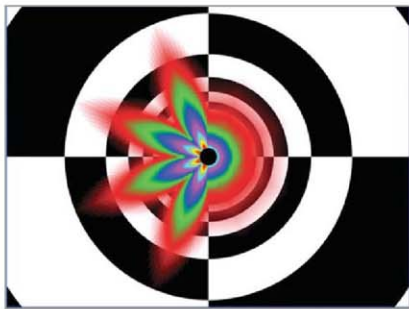
Anti-aliasing adds minute color variations around curves to fool your eyes into thinking that the jagged edges of graphics and text are actually smooth. **Anisotropic filtering**, on the other hand, improves the clarity of textured surfaces at oblique angles so things "farther away" still look sharp.

Since the calculations for both procedures must be made on the fly, the more of either you use—and the higher the resolution you're displaying—the slower you can expect the final graphics to render. Finding the proper balance between appearance and performance can be difficult, but one solution is to get a top-notch graphics card, such as the Asus EAH4870X2 (see p. 33), that will let you crank these settings up to any resolution you choose.



The image on the left shows an object from the game *Half-Life 2*, rendered without anti-aliasing. The image on the right shows the same object rendered with 16x Coverage Sampling Anti-Aliasing; the once-jagged edges now look much smoother.

Note the difference in quality: This image's left side has been rendered with traditional texture filtering, but anisotropic filtering gives the right side a more realistic, eye-pleasing look at any angle.



Images courtesy of Nvidia

Chatter Capture

September
Poll Results

AMD or
Intel?

Intel

59.3%

AMD

40.7%

(of 1,017 responses)



COMPUTER CHATTER

WHAT
PIECE OF
TECH
CAN'T
YOU LEAVE
HOME
WITHOUT?

Tell us at
computershopper.com/traveltech

Give your PC a good foundation.



Toughpower XT

Introducing the all-new Toughpower XT series power supply. You've got all the right processor, graphic card and motherboard, now you need a good foundation to make sure all the components run smoothly. All-new Toughpower XT delivers cleaner, more stable and efficient power to where it is needed and when it is needed with the most current technologies such as Fan-Delay Cool, LED Alarm Panel and 80PLUS® certification.

For more information, please visit us at www.thermaltakeusa.com





WHEN A TV CAN ADJUST TO A
DIFFERENCE IN LIGHT, LIFE'S GOOD.



Introducing the LG70 Series with Intelligent Sensor technology that uses 4,096 sensing steps for superior picture quality customized to your surroundings. Which means an enhanced viewing experience tailored to the light in your room, as well as potential energy savings. And with Full HD 1080p and 120Hz technology, television doesn't get any better than this. www.LGusa.com/LG70



LG

Life's Good