

Bonus Report #2
The Best PC Hardware Of 2010

By Gary Hendricks

Disclaimer

All information and material in this publication is provided for general informational purposes only. The author of this report has used his best efforts in preparing this publication. The author makes no representation or warranties with respect to the accuracy, applicability, fitness or completeness of the information contained in this publication. The author disclaims any warranties (expressed or implied), merchantability, or fitness for any particular purpose.

The author shall in no event be held liable for any loss or other damages, including but not limited to special, incidental, consequential, or other damages. The author assumes no responsibility or liability for any consequence resulting directly or indirectly for any action or inaction you take based on or made in reliance on the information in this publication.

THE PUBLICATION IS PROVIDED ON AN "AS IS" BASIS, WITHOUT WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED. USE OF THE PUBLICATION IS AT YOUR OWN RISK.

Reproduction or translation of any part of this publication by means, electronic or mechanical, beyond that permitted by the Copyright Law, without the permission of the author, is unlawful.

BY USING THIS PUBLICATION, YOU AGREE THAT YOU HAVE READ THE DISCLAIMER AND AGREE WITH ALL THE TERMS.

Table Of Contents

Introduction.....	4
1. Best Motherboards	5
2. Best Central Processing Units (CPUs).....	5
3. Best Random Access Memory (RAM)	6
4. Best Video Cards	6
5. Best Computer Cases	7
6. Best Display Monitors	7
7. Best Hard Drives.....	8
8. Best Optical Drives	8
9. Best Sound Cards.....	9
10. Best Speakers	9
11. Best Power Supplies	10
12. Best Keyboards	10
13. Best Mice	11
14. Best External Hard Drives	12
Conclusion	12

Introduction

Are you having trouble finding the best PC components with which to build your computer? I find that one of the toughest parts of starting a new computer build is to research and select components. How do you know which computer component is the best? What if it is not compatible with the other parts I have?

Questions like these plague many newbies and are quite frustrating because I do not find many good sources of information on this topic. I guess one of the problems is that the rate of innovation in PC components is just too great - every 6 months or so another new technology crops up and everyone wants to get in on the hype.

Without this information, reconciliation is not able to proceed. What I want to try to do in this report is to provide you with a list of the best PC components out in the market right now. I'll divide them into the following categories.

- Best Motherboards
- Best Central Processing Units (CPUs)
- Best Random Access Memory (RAM)
- Best Video Cards
- Best Computer Cases
- Best Display Monitors
- Best Hard Drives
- Best Optical Drives
- Best Sound Cards
- Best Speakers
- Best Power Supplies
- Best Keyboards
- Best Mice
- Best External Hard Drives

Now where do you buy this hardware? Well, the place where I'd go to buy all these components would be NewEgg.com. They are a very trusted name for buying computer hardware online and they stock quality products at the best prices.

1. Best Motherboards

Ok, the very first category of components we'll take a look at is the motherboard category. Here are the nominees:

Gigabyte GA-G31M-ES2L LGA 775 Intel G31 Micro ATX Intel Motherboard (\$54.99)

This is a budget motherboard which supports Quad-core / Core 2 Extreme / Core 2 Duo / Pentium CPUs and has a FSB of 1333/1066MHz. It also has support for up to 4 GB of DDR2 800 memory and comes with PCI Express x16 support.

ASRock Penryn1600SLI-110dB LGA 775 NVIDIA nForce 650i SLI ATX Intel Motherboard (\$89.99)

This is a mid-range motherboard that supports Quad-core / Core 2 Extreme / Core 2 Duo / Pentium CPUs and has a FSB of 1600/1333MHz. We're looking at a maximum supported memory size of 8 GB (DDR2 800) and three PCI Express x16 slots.

ASUS P5E LGA 775 Intel X38 ATX Intel Motherboard (\$199.99)

This high-end motherboard supports Quad-core / Core 2 Extreme / Core 2 Duo / Pentium EE / Pentium D / Pentium 4 CPUs and has a FSB of 1600/1333MHz. It supports up to 8 GB of DDR2 1200 memory and has ample PCI Express slots.

2. Best Central Processing Units (CPUs)

Ok, the next category of components we'll take a look at is the CPU category. Here are the nominees:

Intel Core 2 Quad Q6600 Kentsfield 2.4GHz LGA 775 Quad-Core Processor (\$189.99)

This is a quality CPU at a budget price. You get a Core 2 Quad processor with a FSB of 1066MHz, L1 Cache of 128KB+128KB and a L2 Cache of 2 x 4MB. It also supports 64-bit computing.

Intel Core 2 Quad Q9300 Yorkfield 2.5GHz LGA 775 95W Quad-Core Processor (\$244.99)

This processor is a Core 2 Quad running with a FSB of 1333MHz. It has a L2 Cache of 6 MB and has 64 bit support.

Intel Core 2 Quad Q9550 Yorkfield 2.83GHz LGA 775 95W Quad-Core Processor (319.99)

This is a Core 2 Quad processor with a FSB of 1333MHz and a whopping L2 Cache of 12MB. It supports 64 bit computing.

3. Best Random Access Memory (RAM)

The Random Access Memory (RAM) of your computer is an important component, so it pays to get good modules. Here are is a list of nominees in the RAM category:

Patriot Viper 4GB (2 x 2GB) 240-Pin DDR2 SDRAM DDR2 800 (PC2 6400) Dual Channel Kit RAM (\$47.99)

This budget 4 GB RAM package has a Cas latency of 4, timing of 4-4-4-12 and a voltage specification of 2.2 V. It is great value-for-money and one I'd definitely recommend for the budget conscious.

Crucial Ballistix 4GB (2 x 2GB) 240-Pin DDR2 SDRAM DDR2 800 (PC2 6400) Dual Channel Kit RAM (\$74.99)

This mid-range 4 GB RAM package has a Cas latency of 4, a timing of 4-4-4-12 and a voltage specification of 2.0 V. It is very suited for high performance or gaming computers.

Corsair XMS3 DHX 4GB (2 x 2GB) 240-Pin DDR3 SDRAM DDR3 1600 (PC3 12800) Dual Channel Kit RAM (\$175.00)

This high-end, expensive 4 GB RAM kit has a Cas Latency of 9 and a timing of 9-9-9-24. It's definitely one of the more expensive RAM kits out there, but its performance is second to none.

4. Best Video Cards

Ok, on to the next category - video cards. Here are the list of contenders:

MSI NX8800GTS-T2D320E-HD-OC GeForce 8800 GTS 320MB 320-bit GDDR3 PCI Express x16 HDCP Ready SLI Supported Video Card (\$89.99)

This budget nVidia SLI video card runs at a core clock speed of 575 MHz and a memory clock of 1700 MHz. It supports DirectX 10 and OpenGL 2.0 and comes with DVI, HDTV and S-Video Out ports.

ASUS EN9800GT HB/HTDI/512M GeForce 9800 GT 512MB 256-bit GDDR3 PCI Express 2.0 x16 HDCP Ready SLI Supported Video Card (\$129.99)

This mid-range SLI video card from nVidia runs at a core clock speed of 600 MHz and a memory clock of 1800 MHz. There's support for DirectX 10 and OpenGL 2.1. It also comes with DVI and HDMI ports.

EVGA 896-P3-1260-AR GeForce GTX 260 896MB 448-bit GDDR3 PCI Express 2.0 x16 HDCP Ready SLI Supported Video Card (\$219.99)

This high-end nVidia video card runs at a core clock speed of 576 MHz and a memory clock of 2000 MHz. It supports DirectX 10 and OpenGL 2.1. There is also DVI, HDTV and S-Video Out support.

5. Best Computer Cases

The next category we shall look at is the computer case. Here are the contenders:

Cooler Master Centurion 5 CAC-T05-UB Black /Blue Aluminum Bezel , SECC Chassis ATX Mid Tower Computer Case (\$49.99)

This is a good budget computer case that conforms to the ATX and Micro ATX form factors. It comes with 5 external 5.25-inch drive bays, 4 internal 3.5-inch drive bays, as well as 7 expansion slots. On the front, you get ports for USB, Audio and Firewire.

NZXT Apollo Black SECC Steel Chassis ATX Mid Tower Computer Case – Retail (\$79.99)

This mid-range case conforms to the ATX, Micro-ATX and BABY AT form factors. It includes 5 external 5.25-inch drive bays, 1 external 3.5-inch drive bay, 4 internal 3.5-inch drive bays, as well as 7 expansion slots. You also get USB, audio and Firewire jacks on the front. Definitely a good buy.

Antec Nine Hundred Black Steel ATX Mid Tower Computer Case

This high-end computer case is ATX and Micro-ATX compatible, and comes with 3 external 5.25-inch drive bays, 6 internal 3.5-inch drive bays and 7 expansion slots. Over on the front, we have a power and reset button with blue LED lighting, two USB 2.0 jacks, one FireWire jack, as well as audio in and out jacks.

6. Best Display Monitors

Right, the next category is for display monitors. Here is the list:

Sceptre X22WG-1080P Black 22" 2ms(GTG) Widescreen LCD Monitor (\$169.99)

This budget display monitor has a 22-inch screen, 1680 x 1050 maximum resolution and supports 16.7 million colors. It has a horizontal refresh rate of 25 kHz - 82 kHz, vertical refresh rate of 50 Hz - 75 Hz and supports the WSXGA+ format.

Samsung 2232BW+ Black 22" 2ms Widescreen LCD Monitor (\$239.99)

This mid-range monitor comes with a 22-inch display and a maximum resolution of 1680 x 1050. It has a horizontal refresh rate of 30 to 81 kHz and a vertical refresh rate of 56 to 75Hz. It supports the WSXGA+ display format.

Samsung SyncMaster 305T Black 30" 6ms(GTG) Widescreen LCD Monitor (\$999.99)

This high-end monitor is super costly but it is a 30-inch monitor with a maximum resolution of 2560 x 1600 and support for 16.7 million colors. A solid monitor for hardcore multimedia or gaming users.

7. Best Hard Drives

Hard drives these days offer plenty of storage space for each dollar you spend. Here's the list of nominees:

Seagate Barracuda 7200.11 ST3500320AS 500GB 7200 RPM SATA 3.0Gb/s Hard Drive (\$64.99)

This Seagate drive is a budget level hard drive but offers no less than 500 GB of storage space, a 32 MB cache and average latency of only 4.16ms.

Western Digital Caviar SE16 WD6400AAKS 640GB 7200 RPM SATA 3.0Gb/s Hard Drive (\$74.99)

This hard drive is a mid-range unit, with an ample 640 GB of storage space and a 16 MB cache.

Seagate Barracuda 7200.11 ST31000333AS 1TB 7200 RPM SATA 3.0Gb/s Hard Drive

This is a high-end drive that offers a whopping 1 TB of storage space, a 32 MB cache and an average latency of 4.16ms. It is large in space and extremely fast.

8. Best Optical Drives

Our next stop - the optical drive. Here, we will specifically look at DVD writers (as opposed to CD writers and Blu-ray drives). The price differences between the units here are minimal though - let's take a look:

LITE-ON 20X DVD±R DVD Burner Black IDE Model DH-20A4P-04 (\$19.99)

This budget unit comes with 20X speed for DVD+R, 8X speed for DVD+RW, 20X speed for DVD-R and 6X speed for DVD-RW.

SAMSUNG 22X DVD±R DVD Burner with LightScribe Black IDE Model SH-S222L (\$23.99)

This is a mid-range unit that is very close in price to the budget unit described above. It comes with 22X speed for DVD+R, 8X speed for DVD+RW, 22X speed for DVD-R and 6X speed for DVD-RW.

LITE-ON 22X DVD±R DVD Burner with LightScribe Black IDE Model iHAP422-08 (\$26.99)

This high-end unit comes with 22X speed for DVD+R, 8X speed for DVD+RW, 22X speed for DVD-R and 6X speed for DVD-RW.

9. Best Sound Cards

For those who want to have dedicated sound, here are some of the best sound cards:

Creative Sound Blaster SB0570 Audigy SE 7.1 Channels PCI Interface Sound Card (\$29.99)

This budget level card features the Creative Audigy chipset and 24-bit digital audio, along with 7.1 surround sound, a sample rate of 96 KHz and a SNR of 100 dB. Good value-for-money.

Creative Sound Blaster X-Fi XtremeGamer 7.1 Channels PCI Interface Sound Card (\$90.99)

This mid-range sound card has a Creative X-Fi audio chipset, 24-bit digital audio, 7.1 surround sound, as well as a sample rate of 96 KHz and a SNR of 109 dB.

ASUS Xonar D2X 7.1 Channels PCI Express Interface Sound Card (\$199.99)

A super high-end sound card with the ASUS AV200 chipset, 24-bit digital audio, as well as hardware decode features for Dolby Digital and DTS. It has a high sample rate of 192KHz and its SNR is very high at 118dB. Definitely for those who want unparalleled sound quality.

10. Best Speakers

Alrighty then, we move on to speakers. Speakers help to give you the aural experience you want for your games and multimedia. Here are the nominees:

Creative Inspire T6100 76 Watts 5.1 Speaker (\$79.99)

This budget level 5.1 speaker system features satellite speakers with RMS power /ea: 8 Watts, RMS per channel (4 channels), as well as an 18 Watts centre speaker. The subwoofer has RMS power of 26 Watts, a frequency response of 40Hz ~ 20kHz, as well as a SNR of 80dB. Your audio will sound great and much more vibrant.

Altec Lansing FX5051 89 Watts 5.1 Music & Gaming Speakers (\$183.99)

This mid-range speak system features front speakers with 12 Watts/channel, rear speakers with 12 Watts/channel as well as a center speaker with 13 Watts @ 4 ohms. The subwoofer also has a RMS power rating of 28 Watts. The frequency response of the system is 30 Hz - 20 kHz, with a SNR of >75dB.

Logitech Z-5500 505 Watts 5.1 Speaker (\$302.99)

If you want a high-end speak system, this model is one to consider. With the left / right speakers with 62 watts RMS power, a center speaker with 69 watts RMS power and rear left and right speakers with 62 watts RMS power, this system simply rocks.

The subwoofer RMS power rating is 188 watts, and the unit has a solid frequency response of 33 Hz - 20 kHz. It also has a great SNR of >93.5 dB. The large 10-inch long-throw subwoofer driver with flared bass port provides 188 watts of thunderous bass.

You also get the clarity of a tweeter with the richness and fullness of a separate mid-range. Amazing audio that needs to be experienced to understand its supreme quality.

11. Best Power Supplies

The next component we consider is the power supply unit – lots of choices here, but we've narrowed it down to:

OCZ StealthXStream OCZ600SXS 600W ATX12V / EPS12V SLI Ready Active PFC Power Supply (\$74.99)

This budget power supply unit comes with four +12V rails, an internal 120mm fan, an input voltage of 100 - 240 V, as well as an input frequency Range of 50/60 Hz. Its efficiency rating is about 80%.

Cooler Master Real Power Pro RS-750-ACAA-A1 750W ATX12V / EPS12V SLI Certified CrossFire Ready 80 PLUS Certified Active PFC Power Supply (\$119.99)

This mid-range power supply unit comes with four +12V rails, a solid internal fan, an input voltage of 115 / 230V. Its efficiency rating is more than 80%.

Thermaltake toughpower W0105RU 700W ATX12V / EPS12V SLI Certified CrossFire Certified 80 PLUS BRONZE Certified Active PFC Power Supply (\$165.99)

This high-end power supply unit comes with four +12 rails, a 1 x 14 cm internal fan, as well as a good efficiency rating of up to 85%.

12. Best Keyboards

Keyboards are pretty standard components, but the price differences can be suprisingly large. Let's take a look:

Microsoft Comfort Curve Keyboard 2000 (\$14.99)

A solid budget level keyboard for those who want to save money. It's certified for Windows Vista, has a spill-resistant design and ultra-thin profile keys. It is also very ergonomic, allowing your hands to rest in a more natural position.

Microsoft Natural Ergonomic Keyboard 4000 (\$49.99)

This mid-range keyboard is certified for Windows Vista and has a comfortable 'Gull Wing' design. There's also an optional palm lift for users who want seven-degree reversed slope. This slope allows your wrists to rest while you type.

RAZER Lycosa RZ03-00180100-R3U1 Black USB Wired Standard Gaming Keyboard (\$79.99)

This high-end keyboard is made for gamers and has a keytop with a non-slip rubber finish. It comes with backlight illumination, fully-programmable keys with macro capabilities, a slim keycap structure, as well as a TouchPanel with easy access media keys. Gamers can deactivate the Windows key and include 10 customizable software profiles for on-the-fly switching.

13. Best Mice

Next up, the computer mouse. The mouse can also vary greatly in prices, depending on whether you want a simple mouse or one with super advanced features.

Microsoft N71-00007S Black 3 Buttons 1 x Wheel USB Wired Optical Wheel Mouse (\$9.99)

This simple, basic mouse allows you to navigate with a no-frills scroll wheel. It looks stylish and allows you to customizable buttons for one-click access to commonly used files and functions.

RAZER DeathAdder RZ01-00150100-R3M1 Black 5 Buttons 1 x Wheel USB Optical High Precision Gaming Mouse (\$49.99)

This mid-range mouse is a gamer's mouse. It's certified for Windows Vista, has a 1800dpi Razer Precision 3G infrared sensor, along with a super ergonomic right-handed design. You also get five independently programmable Hyperresponse buttons, with on-the-fly sensitivity adjustment.

Logitech MX Revolution Black 7 Buttons 2 x Wheels USB RF Wireless Laser Mouse (\$84.99)

This high-end (and expensive) mouse features some stuff you don't find in other mice. For one thing, it has a hyper-fast scrolling feature that lets you fly through long documents. There's also the Logitech SmartShift Technology which automatically applies the scrolling mode that best fits the task at hand. You can also use Document Quick-Flip to move effortlessly between documents.

14. Best External Hard Drives

An external hard drive is almost becoming an essential component for desktop computers these days. It serves as a very good backup device and are great value for money. Here are the list of nominees:

Cavalry CAXE CAXE3701T0 1TB External Hard Drive (\$134.99)

This super large external hard drive has 1 TB of disk storage, a super fast USB 2.0 / eSATA interface and a 3.5-inch form factor. Its dimensions are 7.8 x 4.5 x 1.3 inches (HWD) and it weighs in at only 3.5 lbs.

Seagate FreeAgent Go ST903203FGA2E1-RK 320GB 5400 RPM Silver External Hard Drive (\$94.99)

This external hard drive is 320 GB in size and sports a speedy USB 2.0 interface. It also has a very slim form factor of 2.5-inches.

Western Digital My Book Mirror Edition WDH2U20000N 2TB Black External Hard Drive (\$249.99)

This high-end external hard drive is 2 TB in size and has a speedy USB 2.0 interface. It has a form factor of 3.5-inches and features a RAID Mirroring feature. Its dimensions are 6.6 x 6.1 x 3.9 inches (HWD) and weighs in at 5.2 pounds.

Conclusion

I hope this report has given you some insight into the best PC hardware components from 2010. Remember, the best place to get these components is NewEgg.com – it's the premier source for PC components on the web.

Also, if you have comments or suggestions as to how I can improve this report, I'd love to hear from you. Just [drop me a note](#) anytime.

So until next time, here's wishing you good luck and happy computing!

Gary Hendricks runs a hobby site on building computers. Visit his website at <http://www.build-your-own-computers.com> for tips and tricks on assembling a PC, as well as buying good computer components.
