



**Expand your wireless world**

WLAN Pocket Guide





## Faster, broader, better — at home

With the introduction of the next generation of Intel® Centrino® Duo processor technology-based notebooks, with optional features such as Intel® Next-Gen Wireless-N, your wireless home network possibilities take a big leap forward. The new wireless N<sup>1</sup> networks speed your data along more than five times faster than today's 802.11g networks, and widen the wireless coverage around your home.<sup>2</sup>

Intel Centrino Duo processor technology-based notebooks with Intel Next-Gen Wireless-N and a new wireless N access point let you do more wirelessly at the same time with a better experience than ever. Download digital content or send it around the house at record speed. Get high-quality audio and high-definition video faster, better, and in more spots in your home. Reduce dropped connections. And whether it's a bandwidth-hungry multiplayer game or the whole family on the network at the same time, you'll get great performance.

Intel and leading wireless access point companies are working closely together so that Intel Centrino Duo processor technology and new wireless N networks will connect seamlessly. And these notebooks are designed to work with existing 802.11a/b/g access points as well. To ensure compatibility, look for the "Connect with Intel® Centrino™" logo when buying your next wireless access point.

## Live your mobile lifestyle to the fullest

The latest in wireless technology lets you communicate with more people in more ways, get more done in more places, and take advantage of a world of digital entertainment that's getting bigger every day.

Intel Centrino Duo processor technology features an advanced dual-core design that enables outstanding mobile capabilities, a highly immersive entertainment experience, battery life improvements, and expanded wireless connectivity in a variety of cool designs.\*

Notebooks based on Intel Centrino Duo processor technology deliver expanded wireless connectivity features that give you the flexibility to connect to public wireless LAN hotspots located in airports, hotels, and restaurants around the world. With Intel Centrino Duo processor technology and an available Wi-Fi hotspot, you can download your favorite digital music while playing the latest head-to-head online game with your friends at the same time - all with amazingly quick responsiveness.





## Intel® Centrino® Duo processor technology with Intel® Next-Gen Wireless-N

### Advanced Mobile Dual-Core Design

- Improved performance and responsiveness to run multiple demanding applications at the same time with outstanding power savings, enabling great battery life
- Executes multiple threads simultaneously using two cores, maximizing mobile performance and multitasking capabilities
- More efficient cache and bus design enables better performance, responsiveness, and power savings
- Intel® 64 architecture provides headroom to take advantage of future 64-bit applications<sup>A</sup>

### Specialized Multimedia Technologies

- Intel® Advanced Digital Media Boost enables enhanced performance on floating-point-intensive applications, such as video editing, digital music, digital photography, and gaming
- Optional Mobile Intel® Graphics Media Accelerator X3100 provides over 2X performance on graphics applications versus previous-generation Intel® Centrino® processor technology-based notebooks
- Optional Intel® High Definition Audio<sup>S</sup> provides high-quality surround sound for a premium home theater experience while watching TV or movies, listening to music, or playing games

### Amazing New Connections with Intel® Next-Gen Wireless-N Technology

- Enjoy up to 5x performance enhancement and extended wireless coverage in home compared to existing 802.11g networks<sup>2</sup>
- Peace of mind with unrivaled compatibility with existing 802.11a/b/g access points and provides new benefits with wireless N networks
- Lower power consumption enabling improved battery life for more productivity and fewer wireless interruptions<sup>+</sup>

## Build your home wireless N network in four simple steps.

Here's how to get it done:

1. Start by purchasing a new wireless N access point/router, which you can find at most computer stores. Look for the "Connect with Intel® Centrino®" logo on the box for best compatibility.
2. You'll also need a home broadband Internet service like DSL or cable.
3. Attach your broadband connection to the wireless N access point/router.
4. Configure security settings on your notebook. Protect your wireless network by following the manufacturer's instructions to set up WPA or WEP security. The WPA standard is more secure and preferred over WEP.



Over the next five years, the number of commercial hotspots worldwide will increase at a 24.5% compound annual growth rate. By 2009, the number of public hotspots worldwide will top 250,000!<sup>4</sup>



**Widen your wireless world today. All you need is a broadband Internet connection, a wireless N access point, and an Intel® Centrino® Duo processor technology-based notebook with Intel® Next-Gen Wireless-N — and your own imagination.**

**To learn more about Intel Centrino processor technology, visit [intel.com/products/centrino/index.htm](http://intel.com/products/centrino/index.htm)**

**To learn more about hotspots and how to get the most from them, visit [intel.com/support/notebook/hotspots/index.htm](http://intel.com/support/notebook/hotspots/index.htm)**

<sup>1</sup> Wireless N refers to products based on the latest draft specification of IEEE 802.11n standard. 802.11n is currently in the process of being formally ratified in IEEE.

<sup>2</sup> Up to 2x greater range and up to 5x better performance with optional Intel® Next-Gen Wireless N technology enabled by 2x3 Draft N implementations with 2 spatial streams. Actual results may vary based on your specific hardware, connection rate, site conditions, and software configurations. See <http://www.intel.com/performance/mobile/index.htm> for more information. Also requires a Connect with Intel® Centrino® processor technology certified wireless n access point. Wireless n access points without the Connect with Intel Centrino processor technology identifier may require additional firmware for increased performance results. Check with your PC and access point manufacturer for details.

<sup>3</sup> As measured by 3DMark®06 comparing latest generation Intel® Centrino® processor technology-based notebooks including Intel integrated graphics with previous generations of Intel Centrino processor technology. Actual performance may vary. See <http://www.intel.com/performance/mobile/benchmarks.htm> for important additional information.

<sup>4</sup> IDC, Worldwide Hotspot Forecast, 2005-2009, December 2005.

<sup>5</sup> System performance, battery life, high-definition quality, video playback and functionality, and wireless performance and functionality will vary depending on your specific operating system, hardware, chipset, connection rate, site conditions, and software configurations. References to enhanced performance including wireless as measured by SYSmark® 2004 SE, PCMark®05, 3DMark®06, SPEC® CPU2006\* and Adjacent Channel Interference (ACI)\* refer to comparisons with previous generation Intel® technologies. References to improved battery life as measured by MobileMark® 2007, if applicable, refer to previous generation Intel technologies. Wireless connectivity and some features may require you to purchase additional software, services or external hardware. Availability of public wireless LAN access points is limited, wireless functionality may vary by country and some hotspots may not support Linux-based Intel Centrino processor technology systems. See <http://www.intel.com/products/centrino/index.htm> for more information. SPEC, SPECint, SPECfp, SPECrate, SPECweb, SPECjbb are trademarks of the Standard Performance Evaluation Corporation. See: <http://www.spec.org> for more information on the benchmarks.

64-bit computing on Intel architecture requires a computer system with a processor, chipset, BIOS, operating system, device drivers and applications enabled for Intel® 64 architecture. Processors will not operate (including 32-bit operation) without an Intel® 64 architecture-enabled BIOS. Performance will vary depending on your hardware and software configurations. Consult with your system vendor for more information.

<sup>6</sup> Intel® High Definition Audio requires a system with an appropriate Intel chipset and a motherboard with an appropriate codec and the necessary drivers installed. System sound quality will vary depending on actual implementation, controller, codec, drivers and speakers. For more information about Intel® HD audio, refer to [www.intel.com](http://www.intel.com).

<sup>7</sup> Other names and brands may be claimed as the property of others.

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