

Featuring...



AMD PowerNow!™ Technology

In the past, increased processor performance has often meant increased power consumption and shorter battery life. AMD PowerNow!™ technology is an innovative solution available on all AMD mobile processor-based notebooks that can effectively **increase notebook battery life up to 30 percent, while delivering performance on demand**, for the ultimate mobile computing experience.

The key benefits of AMD PowerNow! technology are:

1. Optimizes battery life
2. Provides performance on demand when required by the application
3. Allows the processor to dissipate less heat under normal operating conditions, providing a cooler and quieter-running notebook
4. Operates automatically in the background

How Does AMD PowerNow! Technology Work ?

The premise behind AMD PowerNow! technology is a very simple one. Some applications require less processing power than others. Word processing, for example, consumes relatively few processor cycles, but if you run photo editing or other media-rich applications on the same system, more processor cycles will be required for responsive performance.

AMD PowerNow! technology controls your notebook's level of processor performance automatically, dynamically adjusting the operating frequency and voltage many times per second, according to the task at hand. When an application does not require full performance, significant amounts of power can be saved. However, the processor can "instantaneously" respond to increased workloads, allowing the system to deliver a responsive and rewarding computing experience.

The only difference the user will see on most applications is significantly longer battery life. Performance will still be responsive, with maximum processor performance being delivered when required, and automatic power savings when possible. AMD PowerNow! technology even has benefits when you are working at your desk with the notebook on AC power, since the system will typically run cooler and quieter.

Control Panel Interface

AMD PowerNow! technology and Windows® XP

To take advantage of AMD's power management capabilities, Microsoft integrated support for AMD PowerNow! technology into its new Windows® XP operating system. The power management control panel in Windows XP, known as "Power Schemes", is designed to provide the user with an easy-to-use interface. The Power Schemes tab can be found in the Power Options Properties panel that is accessible via the control panel window.

The Windows XP Power Schemes tab gives the user access to the same performance on-demand control that you've come to expect from AMD PowerNow! technology. Schemes are easy to understand, based on notebook usage scenarios, and control not only processor power usage but other system peripherals as well.

Always on mode puts the processor into maximum performance mode. The other schemes control processor performance based on demand.

The screen shot to the right shows an example of the Power Schemes tab found in Power Options Properties of the Windows XP operating system.



AMD PowerNow! technology and other Windows® operating systems

For some notebook PC's running previous Microsoft Windows operating systems including Windows 98, Windows Me, and Windows 2000, AMD PowerNow! technology drivers will be installed at the factory or as an option during the initial system set-up. If your system supports this, and if the AMD PowerNow! technology drivers have been installed, a new tab should appear in the Windows power options control panel, titled "AMD PowerNow! Technology."

From this tab the user has access to the control of AMD PowerNow! technology. With the proper settings a user can extend battery life by up to 30 percent, without the worry of whether or not the most performance possible is being provided for each application.

Screen shot to the right shows example of Power Options Properties panel.

For questions about AMD PowerNow! technology support on your system, or driver updates, please check on your notebook vendor's web site.



Notebook Purchasing Considerations

In today's highly mobile world, performance is not the only consideration when purchasing a notebook PC. Processor clock speed (or MHz) is only one factor in overall system performance. Power management capabilities and battery life can be an equally important factor in your overall mobile computing experience.

AMD PowerNow! technology is an innovative answer, delivering performance on demand while optimizing battery usage. When considering your next notebook PC purchase, look for a system that supports AMD PowerNow! technology.

The mobile AMD Athlon™ 4 and mobile AMD Duron™ processors...mobile computing without compromise.

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