

## **Intel Intros New WiMAX Silicon Chipset**

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Intel Corporation today announced the availability of its first WiMAX product, providing equipment manufacturers and carriers the ability to deliver next-generation wireless broadband networks around the world. Previously codenamed "Rosedale," the Intel PRO/Wireless 5116 broadband interface device is based on the IEEE 802.16-2004 standard, giving carriers and end-users the confidence that equipment from different vendors will work together.

WiMAX (Worldwide Interoperability for Microwave Access) is a standards-based technology enabling the delivery of last mile wireless broadband access as an alternative to cable and DSL. WiMAX will provide fixed , nomadic, portable and, eventually, mobile wireless broadband connectivity without the need for direct line-of-sight with a base station. In a typical cell radius deployment of three to ten kilometers, WiMAX Forum Certified systems can be expected to deliver capacity of up to 40 Mbps per channel, for fixed and portable access applications. This is enough bandwidth to simultaneously support hundreds of businesses with T-1 speed connectivity and thousands of residences with DSL speed connectivity. Mobile network deployments



are expected to provide up to 15 Mbps of capacity within a typical cell radius deployment of up to three kilometers. It is expected that WiMAX technology will be incorporated in notebook computers and PDAs in 2006, allowing for urban areas and cities to become "MetroZones" for portable outdoor broadband wireless access.

In addition, several service providers worldwide announced plans to begin commercial WiMAX trials based on Intel silicon products later this year, giving consumers and businesses a glimpse at this emerging wireless high-speed broadband technology. Key equipment providers also announced WiMAX solutions based on Intel's product.

WiMAX is a standards-based wireless technology for providing highspeed, last-mile broadband connectivity to homes and businesses and for mobile wireless networks. Intel's WiMAX silicon delivers the features needed to provide cost-effective, high-speed wireless modems for homes and businesses. Initial deployments will enable delivery of broadband Internet access to remote areas not currently served by DSL or cable, and will make it possible to wirelessly connect buildings up to several miles apart. Because it is standards-based, WiMAX technology is expected to make it easier and more cost-effective for new and existing broadband users to enjoy wireless Internet access.

"As a standards-based, high-speed Internet access solution, WiMAX can provide the platform for the next generation of Internet expansion, connecting the next billion Internet users," said Scott Richardson, general manager of Intel's Broadband Wireless Division. "In addition to delivering the first flexible, highly integrated WiMAX system-on-chip, Intel has worked with a number of parties, including carriers and equipment manufacturers, to prepare the industry for the next wave of wireless technology."

## **Optimized for Broad Adoption**



Previously codenamed "Rosedale," the Intel PRO/Wireless 5116 broadband interface device is based on the IEEE 802.16-2004 standard, giving carriers and end-users the confidence that equipment from different vendors will work together. WiMAX solutions based on 802.16-2004 enable the creation of high-speed, fixed wireless broadband networks, providing Internet connectivity, Internet Protocol (IP) and TDM Voice capabilities and IP-based real-time video at high speeds.

The Intel PRO/Wireless 5116 broadband interface is the first 802.16-2004 system-on-chip optimized for cost-effective WiMAX modems and residential gateways. These units may be placed in either homes or businesses to receive and transmit a wireless broadband signal.

The product is designed with a high level of integration to streamline the development process and reduce costs for equipment manufacturers. It also offers a programmable architecture that makes it easier for equipment manufacturers to add innovative, unique applications on top of the standards-based Intel solution.

To bring WiMAX connectivity to a broader audience, the Intel PRO/Wireless 5116 broadband interface enables both outdoor WiMAX products as well as new indoor solutions, such as self-installable WiMAX modems and residential gateways.

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