

Intel Discloses WiMAX Silicon Plans

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[Intel Corporation](#) today disclosed key technical details of its upcoming wireless broadband chip for [WiMAX](#) products, which will enable long-distance, high-speed wireless Internet access for homes and businesses.

The upcoming wireless component, code named "Rosedale," is expected to be the first "system-on-a-chip" design for cost-effective customer premise equipment (CPE) that supports IEEE 802.16-2004 (previously known as IEEE 802.16REVd). CPEs are placed at a home or business to transmit and receive a wireless broadband signal providing Internet connectivity. IEEE 802.16-2004, also known as WiMAX, is an emerging wireless standard that promises to provide broadband connectivity at DSL speeds across long distances.

Intel has begun sending sample Rosedale product to key customers.

"High-speed DSL and cable broadband access are only available to a fraction of computer users globally," said Scott Richardson, general manager of Intel's Broadband Wireless Group. "WiMAX will make it possible to build cost-effective, high-speed wireless connections to homes and businesses be they in urban or rural environments. Intel has focused its WiMAX development efforts on making it easier and more cost effective for the next generation of computer users to wirelessly access the high-speed Internet."

Innovation through Integration and Standardization

The new Rosedale chip was designed with a high level of integration, in

an effort to streamline the design process and reduce the cost of customer premise gear. Rosedale will include the 802.16-2004 MAC and OFDM PHY, an integrated 10/100 MAC, inline security processing and a TDM controller interface which enables applications such as broadband Internet streaming data and voice. Integration of these features reduces the size of the electronics since there are fewer chips required, and speeds validation and testing of the device, allowing system designers to develop CPEs more quickly and easily. Lowering CPE costs makes it more affordable for business and residential users to adopt WiMAX, driving broader adoption.

The Rosedale wireless broadband interface will support the newly ratified IEEE 802.16-2004 standard, which will make it easier for carriers and end-users to select equipment from different vendors. WiMAX Forum, an industry group chartered to test and certify interoperability among WiMAX products, is expected to hold initial interoperability testing and certification programs in 2005.

In addition to sampling Rosedale to key customers, Intel continues to work with carriers and equipment manufacturers worldwide on early trials.

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