Intel Demonstrates Its First Mobile WiMAX Baseband Chip

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Intel Corporation today announced design completion of its first mobile WiMAX baseband chip. Combined with the company’s previously announced single-chip, multi-band WiMAX/Wi-Fi radio, the pair creates a complete chipset called the Intel WiMAX Connection 2300.

The Intel WiMAX Connection 2300 chipset design was demonstrated during Executive Vice President and Chief Sales and Marketing Officer Sean Maloney’s keynote at the 3G World Congress and Mobility Marketplace in Hong Kong.

Maloney showed an Intel Centrino Duo mobile technology-based laptop with mobile WiMAX (IEEE 802.16e-2005), Wi-Fi (IEEE 802.11n), and high-speed downlink packet access (HSDPA) 3G capabilities successfully accessing the Internet at broadband speeds over a mobile WiMAX network. The demonstration illustrates the high-speed and quality of service capability of WiMAX for handling content-rich applications that can be extremely responsive without interference from other wireless technologies residing on the same system.

“Intel continues to drive innovation in mobile broadband access by eliminating the seams that prevent ubiquitous wireless connectivity,” said Maloney. “The Intel WiMAX Connection 2300 will help speed the deployment of mobile WiMAX, and accelerate the availability of a new wave of “personal broadband” laptops and mobile devices that deliver the real Internet.”
The completed design of the Intel WiMAX Connection 2300 brings Intel a step closer to an integrated wireless system-on-chip that will help drive WiMAX adoption by maximizing useable space in mobile devices. As laptops become smaller, for example, they will have limited space for new technologies. Integration also helps enable ubiquitous connectivity on ultra mobile PCs, consumer electronics and handheld devices that have significant size constraints for the number of cards or components.

With global frequency support for standards-based Wi-Fi and WiMAX, scalable channel bandwidth, and high-performance multiple-antennas, the Intel WiMAX Connection 2300 will help bring about mobile communications and rich content across supported networks anywhere in the world. For the first time, Intel incorporated multiple input/multiple output (MIMO) functionality into the baseband chip to enhance the signal quality and throughput of wireless bandwidth. The baseband chip also employs the same software for Intel’s WiMAX and Wi-Fi solutions to help ensure unified management for connectivity. Over-the-air provisioning supports easy configuration and enables consumer activation of services, shifting the traditional hands on service provider business model to a direct activation one based purely on consumer purchases of mobile devices. The baseband chip also has low power requirements for increased battery life and lower thermals to support smaller and thinner designs.

With the initial Intel WiMAX Connection 2300 chipset design now complete, Intel plans to focus on validating and testing the product, with plans to sample both card and module forms beginning in late 2007.

Source: Intel

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