

Alereon Introduces Advanced 480 Mbps Ultrawideband Evaluation Kit

January 3 2005

Alereon, a leading fabless semiconductor company developing wireless solutions for the <u>Ultrawideband</u> (UWB) and Wireless USB (W-USB) markets, today announced availability of the AL4000-EVK Evaluation Kit. The AL4000-EVK is a sophisticated UWB hardware and software environment for developing and testing real world UWB applications. The AL4000-EVK is based on the Alereon AL4000 series UWB chipset, which operates at speeds from 55Mbps to 480Mbps; nearly 5 times faster than any other UWB personal area network (PAN) chipset.

Ultrawideband (UWB) technology will bring the convenience and mobility of wireless communications to high-speed interconnects in devices throughout the digital home and office. Designed for short-range, wireless personal area networks (WPANs), UWB is the leading technology for freeing people from wires, enabling wireless connection of multiple devices for transmission of video, audio and other high-bandwidth data.

UWB, short-range radio technology, complements other longer range radio technologies such as WiFi*, WiMAX, and cellular wide area communications. Its use will be to relay data from a host device to other devices in the immediate area (up to 10 meters or 30 feet).

The compact AL4000-EVK is designed to provide the flexibility to develop prototype applications for any kind of UWB or W-USB enabled consumer electronics equipment. The MBOA compatible AL4000-EVK combines Alereon's AL43000-EVB MAC and AL4400-EVB PHY



evaluation boards with a PC motherboard in a compact 8" enclosure. The AL4000-EVK also incorporates multiple USB, IEEE 1394 (Firewire), Ethernet, video, audio and serial ports and includes a DVD drive, thereby creating the industry's only complete platform for prototyping or developing PC or consumer electronic-based applications. Initial systems will come with Microsoft's XP operating system, with both Windriver's VxWorks and Linux installations available. The AL4000-EVK is unique in its ability to build and demonstrate advanced PANs that enable sophisticated applications.

Alereon's AL4300-EVB MAC evaluation board is at the heart of the new test platform. The PCI-based MAC provides an option slot for an MBOA compatible PHY module based on Alereon's high performance transceiver and advanced 0.13micron mixed-signal CMOS baseband processor.

"We are very pleased with the rapid progress of our technology development, including the world's first demonstration of UWB connections at 480 Mbps," said Eric Broockman, chief executive officer of Alereon. "The introduction of the AL4000-EVK is yet another important milestone in the company's growth, as partners and customers increasingly look to Alereon for leading MBOA-compliant UWB solutions."

"The coming year will see the demand for commercial UWB chipsets begin to meet its long-expected promise," said Kurt Scherf, vice president and principal analyst for Parks Associates, a market research and consulting firm specializing in emerging technologies. "Companies such as Alereon have much to gain with developments such as these, and we look forward to continued success in 2005."

The AL4000-EVK is the latest in a series of significant accomplishments for Alereon. In late 2004, Alereon became the first to perform an over-



the-air demonstration achieving 480Mbps with MBOA compliant chips. Orders for Alereon's AL4000-EVK are being taken now, with first shipments scheduled within two weeks.

Citation: Alereon Introduces Advanced 480 Mbps Ultrawideband Evaluation Kit (2005, January 3) retrieved 24 April 2024 from https://phys.org/news/2005-01-alereon-advanced-mbps-ultrawideband-kit.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.