

Companies Demonstrate Distribution of Multi-Stream High-Definition Content via HomePlug Powerline and UWB Networks

Intellon Corporation, the world leader in powerline communications, today announced that Samsung Electronics Company is using Intellon's HomePlug AV powerline technology together with Freescale Semiconductor's Ultra-Wideband (UWB) wireless technology to demonstrate the distribution of multiple high-definition (HD) content streams throughout the home. The combination of HomePlug AV and UWB networking technologies enables consumers to easily connect all of their digital entertainment devices and distribute the content anywhere in the home with the added freedom of mobility. The demonstrations will take place in the Intellon and Freescale booths at the International Consumer Electronics Show.

In the demonstration, Intellon's HomePlug AV technology serves as the network backbone, transmitting HD content from Samsung's media server to multiple HDTV displays by simply plugging the server and the HDTVs into any convenient power outlets. Simultaneously, the HD content is transmitted via powerline from the Samsung media server to a Samsung thin client using Freescale's UWB technology to stream the content wirelessly to another HDTV.

According to a recent report from Parks Associates, strong consumer demand for connected home entertainment will drive the growth of multimedia networks over the next five years. The market opportunity for multimedia connectivity, including PCs, mobile platforms, and consumer electronics devices, will reach 120 million units by the end of 2008. As consumers purchase more digital devices for their ideal digital home, a stable hybrid network consisting of mature technologies is necessary.

"The purpose of this demonstration is to show the level of maturity of emerging home networking technologies such as HomePlug AV and UWB," said Jaemoon Jo, VP of Samsung Electronics. "We believe these two networking technologies provide the backbone needed for customers to connect a myriad of devices in the home, providing a more satisfying entertainment experience."

"Freescale's UWB chipset solution working together with Samsung and Intellon's state-of-the-art home entertainment audiovisual technologies is a powerful combination," said Martin Rofheart, director of UWB Operations, Freescale Semiconductor. "UWB brings new functionality and opportunity to video, laptop and mobile/handheld products needing a high speed, cost effective wireless solution."

"The industry is witnessing a trend in the growing need among consumers to converge multiple digital devices throughout the home," said Andreas Melder, senior vice president of strategic business development, Intellon Corporation. "This trend has led to an increased interest in a home broadband gateway that offers reliable whole-house high definition audio and video sharing. Our joint demonstration with Samsung and Freescale emphasizes HomePlug AV's flexibility to support and complement other networking technologies such as UWB."

HomePlug AV is a technology poised to change the way that HDTV, digital audio, and Internet content are distributed around the home, due to its ease of installation and the ubiquity of power outlets within the home. Intellon is a major technology contributor to the HomePlug AV specification, which is being finalized now by the HomePlug Powerline Alliance. The CES demonstration by Intellon is based on a prototype of the HomePlug AV specification.

Building on the proven performance of HomePlug 1.0, HomePlug AV will deliver a number of benefits, including:

- 200-Mbps class networking, enough to carry multiple HDTV programs around a house
- An advanced Physical Layer that offers near-capacity throughput performance and exceptional coverage for robust communications over noisy power line channels
- A high-efficiency MAC layer that incorporates both scheduled access (TDMA) with Quality of Service (QoS) guarantees, and contention access (CSMA). Features that are a must for the demands of multi-media content delivery include guaranteed bandwidth reservation, tight control of latency and jitter, and high reliability.
- Advanced Network Management functions and facilities capable of supporting plug-and-play, user and service provider set-up and configuration
- Co-existence modes enabling multi-network operation, hidden node service, Broadband over Powerline (BPL) co-existence and backwards compatibility with HomePlug 1.0

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