

Philips introduces UMA mobile phone reference design for phones that automatically switch between cellular and WLAN netw

14 March 2005

Royal Philips Electronics announced today a complete Unlicensed Mobile Access (UMA) semiconductor reference design to make it easy for mobile handset manufacturers to bring UMA-enabled phones to their customers. The new UMA reference design creates a blueprint for a mobile phone that accesses GSM and GPRS mobile services through traditional cellular networks to automatically switch over to WLAN access points. This gives mobile phone customers added flexibility for advanced phone services as their phones detect the fastest and most cost-effective network without interruptions. If a phone is taken out of the WLAN range, it seamlessly switches back to the cellular network.

Philips is working closely with Alcatel, a leading provider of communications solutions, on interoperability tests between UMA handsets based on the Philips Nexperia UMA reference design and the Alcatel 5020 Spatial Atrium mobile call server/softswitch. The Alcatel switching solution enables service providers to extend customer roaming capabilities as they switch between cellular networks and WLAN access points. Alcatel's customers include global telecommunications carriers, internet service providers and enterprises.

Philips' complete UMA reference design features the industry's lowest-power 802.11g WLAN system-in-a-package (SiP) for connections to WLAN access points. The low-power characteristics of this semiconductor solution are extremely important to mobile phone applications, where customers do not want to have their talk-time jeopardized by other power-hungry applications. The UMA switching capability is based on software from industry leader Kineto Wireless. These

features are added to the proven Philips Nexperia™ Cellular System Solution 6120 for a complete reference design that allows manufacturers to quickly manufacture UMA phones without the delays associated with the extensive testing required for carrier-quality mobile phones.

"We have combined our new low-power 802.11g technology and Kineto's industry-leading UMA switching technology with our Nexperia Cellular System Solution to create a powerful mobile phone reference design that makes it easy for people to take advantage of advanced phone services," said Gert-Jan Kaat, senior vice president, Business Unit Mobile Communications, Philips Semiconductors. "Our new UMA reference design is optimized for performance, scalability and ease-of-deployment, with the ability to make it simple for mobile users to connect to voice, data and entertainment services."

"Philips is a leader in bringing complete reference designs to market that makes it easy for mobile handset manufacturers to offer high-quality products to their customers," said Mark Powell, vice president and founder of Kineto Wireless. "The low power aspect of the 802.11g solution is unlike any other capability available in the market today and should encourage the rapid adoption and deployment of UMA-compliant cell phones."

The Nexperia 6120 System Solution supports a wide variety of multimedia applications and includes the state-of-the-art GSM/GPRS/EDGE mobile platform, an RF baseband transceiver, a power amplifier, a power management unit and a battery charger. This complete solution provides mobile handset manufacturers with an easy and cost-effective way to bring advanced multimedia mobile features to their customers.

Kineto's UMA Client Software is added to the Nexperia 6120 System Solution in this reference design to give mobile phones the ability to roam seamlessly between mobile networks and WLANs. When combined with Philips' new low-power 802.11g WLAN SiP, the advantages of UMA become readily apparent. The 802.11g SiP enables mobile phone users to access voice, data and multimedia services through WLAN networks up to five times faster than current 802.11b products, without compromising the battery life of mobile phones. The complete reference design offers mobile phone manufacturers quicker time-to-market in a cost-effective manner.

APA citation: Philips introduces UMA mobile phone reference design for phones that automatically switch between cellular and WLAN netw (2005, March 14) retrieved 20 October 2021 from <https://phys.org/news/2005-03-philips-uma-mobile-automatically-cellular.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.