

Software Programmable Platform Performs Voice and Data Calls in Multiple Bands and Standards

Lime Microsystems announces that its single-chip multi-band multi-standard RF transceiver has been selected by Global Wireless Technologies for the latest version of its Universal Access Point (UAP™) femtocell, the UAP106/232.

The UAP106/232 is a configurable platform for femtocells supporting WCDMA and CDMA2000 standards and is software upgradeable to support 4G LTE. The UAP106/232 uses the LMS6002DFN transceiver in the full range of frequencies between 700 MHz and 3.8 GHz with multiple bandwidths of up to 20 MHz. Global Wireless Technologies has validated Lime's LMS6002DFN transceiver by performing data and voice calls in WCDMA band 1, 2 and 5.

The UAP106/232 provides mobile wireless service providers with a high-capacity, consumer-enterprise-class cellular access point in an unobtrusive form factor. With peak data rates from 7.2/3.1 Mb/s, and voice channel capacity of up to 32 users, the UAP delivers the ultimate in performance, flexibility and ease of deployment and use. Mobile users sending or receiving voice or data calls on their existing mobile terminals within range of the UAP will get improved coverage.

"The philosophy behind GWT's UAP™ industry-first design is to deliver a fully software re-programmable, multi standard platform (upgradeable to 4G) capable of delivering the most advanced services to users as network requirements evolve," comments David Gross of GWT. "The re-programmability of Lime's single-chip transceiver is compatible with this philosophy in that it supports multiple bands and can therefore, be adapted for emerging bands and standards."

"Our configurable transceiver is an ideal match for GWT's configurable access point platform," comments Dr. Ebrahim Bushehri, CEO of Lime Microsystems. "Universal platforms like the UAP are valuable in enabling the widespread adoption of femtocell technology, offering operators worldwide maximum flexibility when extending network coverage for existing and future cellular standards."

The LMS6002DFN is a single-chip multi-band multi-standard transceiver IC that can be digitally configured to operate in the full range of frequency bands between 375 MHz and 4 GHz, with 16 user-selectable bandwidths of up to 28 MHz. It can therefore transmit and receive data across all WCDMA and CDMA bands, as well as those used or planned for WiMAX and LTE. This removes the need for individual transceiver chips for each of the different bands, and allows a small cell base station to be reconfigured rapidly and simply. The resulting reduction in bill of materials reduces costs and inventory for OEMs.

The LMS6002DFN features high performance dual 12-bit ADC and DAC blocks which provide the necessary multiplexed parallel interface to all currently available

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baseband ICs on the market for femtocell applications. It is packaged in a 9x9mm 116-pin DQFN package, and is available alongside an evaluation platform and reference design.

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