SoftFone®-W Chipset for W-CDMA Mobile Terminals

Features

- Complete chipset for W-CDMA UMTS/3GPP terminals
- Multimode support allowing seamless transition between W-CDMA/GSM/GPRS/EDGE networks
- Support for multimedia applications including MP3 audio
- Based on field-proven and award-winning SoftFone architecture
- High performance Blackfin® Processor core
- ARM9™ Control Processor
- Othello® direct conversion radio

Overview

ADI’s SoftFone-W chipset provides a complete solution for developers of 3G mobile terminals based on the W-CDMA (Wideband Code-Division Multiple Access) UMTS/3GPP standard. W-CDMA, an ITU standard, is one of the fastest-growing areas of the wireless communications market. It is a third-generation (3G) mobile wireless technology that promises much higher data speeds to mobile and portable wireless devices than commonly offered in today’s market.

Utilizing the field-proven and award-winning SoftFone architecture, ADI’s SoftFone-W chipset includes all of the components necessary for the baseband signal processing and control, RF, and analog-interface functions. As ADI’s SoftFone architecture is completely RAM-based, wireless terminal developers can quickly and easily adapt to evolutionary changes in the W-CDMA standard and also customize user features and options in software for a wide range of mobile terminals.

Furthermore, the SoftFone-W chipset includes full multimode support allowing seamless transition between W-CDMA/GSM/GPRS/EDGE networks and enables applications such as mobile/portable voice, images, data, MP3 audio, data, and video communications at up to 384 kbps. In addition to W-CDMA, SoftFone chipsets are also available for GSM, GPRS, EDGE, and TD-SCDMA standards and are used by many leading mobile device manufacturers and brands worldwide.

www.analog.com/softfone
SoftFone-W Chipset Overview
ADI’s SoftFone-W chipset is a complete solution and provides the components needed for design of multimode W-CDMA terminals. The chipset includes the analog and digital baseband processors, radio and power management capability simplifying the design of multimode W-CDMA terminals. The SoftFone-W chipset is based on ADI’s Blackfin Processor, which offers best-in-class digital signal processing performance required for advanced cellular handsets. The chipset’s digital baseband processor achieves over 250 MHz performance and exceptionally lower power consumption through Blackfin’s Dynamic Power Management capability.

SoftFone-W also features an analog baseband and power management IC, designed with ADI’s leading expertise in analog and mixed-signal circuits. The analog baseband processor provides a full set of audio features as well as efficient power management. ADI’s Othello direct-conversion radio technology greatly reduces the form factor of a wireless terminal by eliminating the need for additional filters and components. Additionally, the SoftFone-W chipset includes interfaces for cameras, color displays, IR, USB, and SD/MMC, allowing mobile terminal manufacturers to create several designs with varying levels of feature sets for a wide range of models.

About Analog Devices in Wireless
Analog Devices has been a leading supplier of chips and chipsets for digital wireless systems since 1990. Analog Devices has built a vast portfolio of products for the design of mobile devices that has evolved from catalog DSPs and analog components, to sophisticated digital baseband processors, advanced mixed-signal, power management, and radio frequency ICs, to complete chipsets and reference designs. These products include a number of industry firsts including the Othello family—the world’s first open-market direct-conversion radio chipset; and the SoftFone platform, the first RAM-based digital baseband processor, which enables wireless terminal device manufacturers to easily customize user features and options entirely in software, while incorporating breakthrough advancements in power consumption, cost, and size. SoftFone chipsets are available for GSM, GPRS, EDGE, TD-SCDMA, and W-CDMA standards.