GSM Direct Conversion Radio Chip Set

Analog Devices' Othello&#153, a GSM (Global System for Mobile Communications) direct conversion radio set, features a revolutionary radio architecture that provides 30-50 percent savings in cost and size for the next generation of dual-band and triple-band GSM phones.
Consisting of the AD6523 transceiver and the AD6524 synthesizer, Othello allows incoming signals to be &quotdirectly converted&quot to baseband, thus eliminating the need for IF (Intermediate Frequency) components. In addition, Othello's patented architecture provides two other significant performance benefits. First, the ship set enables 1,000 hours, or 1.5 months, of standby time for GSM cellular phones. Second, it provides capabilities for data rates of 25-30 times than the 14.4 kbps of current GSM solutions. That allows next generation content, like web browsing, e-mail, games, and real-time video to be possible over cellular phones and GSM platforms.
This product has many features such as new ADI Superhomodyne&#153 Architecture (Direct Conversion Receiver) that meets current and future market demands, flexible and upgradable features to support future generations of GSM phones and multiple applications, 30-50 percent cost and space savings that result in less expensive and smaller phones, an RF platform suitable for multi-mode and/or software radio markets, the ability to integrate single chip RF/Modulator/baseband 28-TSSOP (AD6523) with separate synthesizer 20-TSSO. This chip set is also implemented in 0.6 um BiCMOS process, has multi-band operation and virtual transmitter loop, an Ultra Fast Locking Fractional-N synthesizer for GPRS and signal chain optimization by utilizing ADI's systems experience as well as design and process technology.

Source URL (retrieved on *12/08/2013 - 10:53pm*):
http://www.wirelessdesignmag.com/product-releases/2001/04/gsm-direct-conversion-radio-chip-set?qt-digital_editions=0