



corDECT WIRELESS LOCAL LOOP SYSTEM

COMPLETE DECT SYSTEM CUTS DEVELOPMENT COSTS, SPEEDS TIME-TO-MARKET

Now there is a faster, easier, more cost-effective way to bring advanced-technology DECT wireless local loop (WLL) to today's demanding marketplace. Analog Devices' corDECT is a comprehensive "turnkey" system designed to meet diverse customer needs now and well into the 21st century.

Focusing on the emerging markets for basic telephony services, corDECT enables local OEMs to custom-develop DECT WLL implementations to national PTT standards.

From switch...to base station...to wallset...to handset, corDECT offers levels of affordability and reliability that no other DECT system can match. Readily adaptable to high or low subscriber densities, it is optimized for trouble-free deployment, management and maintenance. corDECT incorporates high-performance, software upgradable IC technology — including Analog Devices' AD6400 chipset solution. The AD6400 features a unique, highly integrated architecture that minimizes the cost and complexity of bringing top-quality DECT equipment to market. All DECT standards-specific functions are built in, allowing you to focus on your own value-added features and services.

Analog Devices' corDECT gives you a cost-effective system solution for rapidly implementing leading-edge DECT WLL capabilities.



FEATURES

- Complete, modular DECT system — includes all basic components for smooth, rapid, cost-saving WLL deployment
- Leading-edge IC functionality — built on Analog Devices' high-performance AD6400 DECT chipset and programmable digital signal processing (DSP) solutions
- Advanced radio capabilities — AD6400 radio section features a dual-IF superhet design for enhanced sensitivity and stability
- Enables cost-effective implementation — multi-carrier TDMA and dynamic channel selection (DCS) for low cost per subscriber
- Wide flexibility — ISDN/GSM compatibility; fax, data and video transmission capabilities
- Consistent voice quality — 32 Kbps speech encoding yields audio performance equivalent or superior to standard wired systems
- Standards compliance — fully meets DECT and ETSI specifications

A FULL-FUNCTION, EASY-TO-IMPLEMENT WLL SYSTEM

The corDECT system comprises four modular components:

- corDECT DECT Interface Unit (DIU)

At the heart of the system is the corDECT DIU, which acts as the interface to the public telephone network.

Supporting up to 1,000 subscribers, each DIU is a fully redundant ADPCM switch that connects as many as 20 base stations to a local exchange. It also implements all billing and OMC functions.

- corDECT Compact Base Station (CBS)

This small, pole-mounted, weather-proof unit is connected to, and remotely powered from, the DIU. This connection is the only wired segment of the entire corDECT architecture: it requires just three pairs of wires. Each wire carries 144 Kbps in both directions using integrated circuits designed for N-ISDN communications.

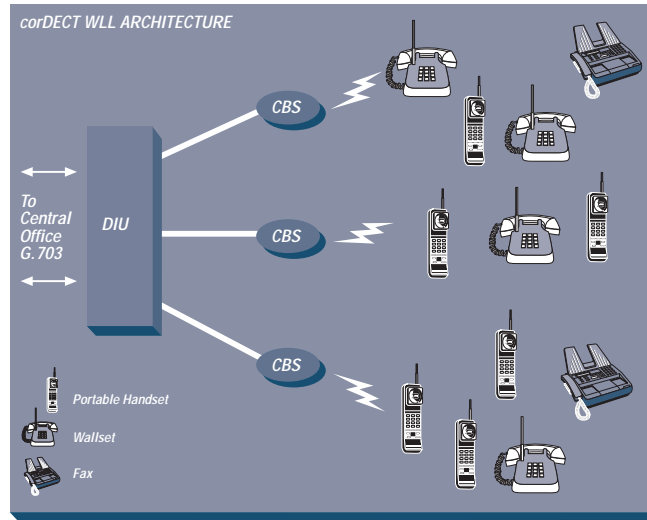
One CBS serves between 30 and 100 subscribers in a neighborhood. Base Stations may be mounted in an uncoordinated manner; no frequency planning is required. Each CBS provides 12 simultaneous channels for a call-carrying capacity of up to five Erlangs.

- corDECT Wallset

The wallset is a fixed subscriber unit mounted at the user's premises. A two-wire interface on the wallset connects to a standard telephone/fax machine or a modem. Battery back-up supports up to 24 hours of operation during power outages. An external antenna may be window- or roof-mounted to increase radio range.

- corDECT Handset

The handset is a small, lightweight, 3-volt unit. Using dynamic channel selection (DCS), a handset can communicate with any base station connected to a single DIU.



STATE-OF-THE-ART IC TECHNOLOGY

The corDECT terminal units — base station, wallset and handset — are based on Analog Devices' innovative AD6400 chipset solution. This compact, highly programmable 3-chip configuration is optimized to accelerate manufacturing cycle times and accommodate unique features for market-place differentiation.

Tight integration of base-band and radio components cuts production costs by reducing overall system size, eliminating expensive interfaces and facilitating rapid design-in.

The corDECT DIU takes advantage of Analog Devices' performance-proven digital signal processing technology. It can be configured with a programmable fixed-point DSP such as the ADSP2183 for RAM-based development work, or with a ROM-based ADSP217X for production volumes. These devices provide 27 MIPS of processing power, enabling all DECT software to be run without the need for an external controller.

This DSP-based approach gives you abundant flexibility to provide for diverse user needs. It allows various levels of the DECT protocol stack to be implemented depending on the specific application and desired capabilities.

In addition, corDECT incorporates cutting-edge software and system design know-how from Analog Devices' development partners: the Indian Institute of Technology, Madras; and Midas Communication Technologies Private Limited.

ANALOG DEVICES IN COMMUNICATIONS

Analog Devices is committed to supplying the communications industry with the highest-performance solutions at the lowest possible cost. We meet the needs of today's broadband wired and wireless markets with leadership capabilities in analog, digital and mixed-signal processing, RF signal processing, data conversion, interfaces and total system design.

For more information about corDECT, contact Analog Devices:

Tel: +1-617-461-3060
Fax: +1-617-461-4360