

## CT0 Analog Cordless

### CT0 Analog Cordless Chipset

#### CT0

This low-frequency analog cordless standard is established in many countries at various frequencies around 50MHz, including:

- France (26/41 MHz)
- Australia (30/39 MHz)
- The Netherlands & Spain (31/40 MHz)
- China, S. Korea, Taiwan, USA, Latin America (46/49 MHz)
- China (48/74 MHz).

As this market continues to grow (in terms of countries and increasing user density), our complete module/chip-set system approach to CT0 offers a low-cost solution with a number of advantages over competitors:

- It is an auto-scan, multiple-channel access (MCA) system: the base station and handset(s) automatically detect and select a free channel for incoming and outgoing calls
- 8 of the most commonly used CT0 frequency tables are incorporated in the standard chip-set, consequently software changes are not required
- One base-station unit can operate up to eight handsets.

System design is based on an advanced communication protocol using MSK (minimum shift keying) at 1200bps. This means high spectral efficiency and low-energy harmonics. Moreover, communication between base unit and handset features:

- A 20-bit security code (factory or user programmable)
- 2-way paging and 2-way intercom
- Call transfer between base unit & handset OR handset & handset
- Noise reduction for high audio performance
- DTMF/pulse dialling, or mixed-mode dialling.

The base-station unit offers a full-function speaker phone with keypad for use without handset, and a last number redial memory of 32 digits. It also includes a repertory dial memory (10 numbers of 24 digits, or 10 numbers of 16 digits + 3 emergency 28-digit numbers) and a music-on-hold facility.

The handset design incorporates an advanced power-saving algorithm to achieve a *12-day standby time*. With the same number memory facilities as the base station, it also includes a low-battery warning, an out-of-range warning and a back-light for night use.

#### Evaluation kit

Demo/evaluation boards are available to cover all CT0 frequencies (type OM4760-X; X = country version).

#### The Philips Semiconductors CT0 chipset consists of the following ICs:

		IC17 Page
SA676	Low-voltage mixer FM IF system .....	522
NE/SA576	Low power compandor .....	1433
PCD4431-2	Cordless Decoder (handset) .....	IC03
PCD3333-2	Cordless Decoder (basestation) .....	IC03
TEA1094	Handsfree Speaker Phone Amplifier (basestation) .....	IC03
TEA1062/ TEA1062A	Speech and Line Interface (basestation) .....	IC03
P80CL51	Microcontroller .....	IC20
TDA7052A/AT	1-Watt low voltage audio power amp with DC volume control .....	IC03

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