

HW86010

DECT transceiver module
The optimum embedded wireless solution



HÖFT & WESSEL

The DECT module HW86010 is a highly versatile and powerful engine for embedded DECT applications.



Key Advantages

- High speed data transmission paired with low power consumption
- Very small footprint for easy integration
- Versatile interfaces for all sorts of data and voice applications
- Suited for point-to-multipoint
- Prepared for voice services
- Prepared for the future through simple firmware upgrades

Typical Applications

- Wireless internet access
- Radio networks
- Mobile data acquisition
- Automation and industrial control

The architecture of the HW86010 supplies a full set of useful features for voice and data services in various environments.

The module performs the complete radio and baseband processing of DECT signals including errorcorrecting data link protocols. It can be used in point-to-point and network applications.

Interfaces include RS-232 for serial data, PCM connection (IOM-2 style) for analogue for voice, I2C and analogue input/output. General purpose digital I/Os and a bus interface make the HW 86010 easily expandable. Optimally suited for data transmission the HW 86010 offers reliable data channels up to 500Kb/s.

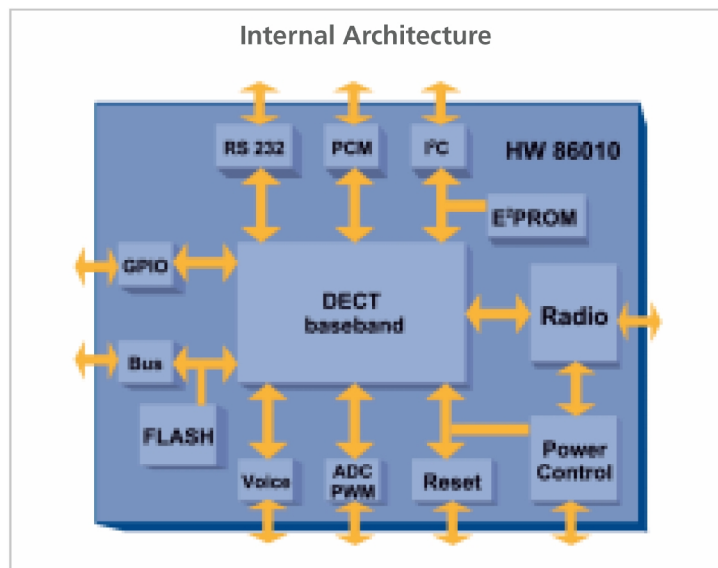
DECT –

The ideal wireless technology

DECT (Digital Enhanced Cordless Telecommunications) is a highly successful wireless technology. The open DECT standard is accepted in more than 100 countries worldwide.

DECT offers competitive advantages for voice and data transmission.

- Exclusive frequency bands eliminate interference
- DECT is free of collisions and congestions
- Co-located DECT systems work together
- Systems are scalable to multicell networks
- Up to 64 radio links per base station



Competent in DECT

Höft & Wessel has been a pioneer in wireless data transmission over DECT and is technology leader in that market. Skilled system engineers continually upgrade and customize the Höft & Wessel communication products for your benefit.

Benefits of a modular concept

All radio products from Höft & Wessel are based on a modular concept with out-standing advantages.

- Standard modules give best value at lowest price because of volume production
- No initial development costs because of ready-to-use functionality
- Change between DECT and FHSS standards just by plugging-in a different module
- Shorter development cycle, means early time-to-market

Chose from a family of modules the optimum solution for your requirements. All modules are interface compatible and interoperable to equipment following the same radio standard. All radio functions are perfectly encapsulated for the benefit of a much simpler overall design.

Technical Data

Dimensions:	Approx. 52 x 37 x 8mm
Weight:	30g
Temperature range:	–10 to +55 °C operating
Operating voltage:	3.0 to 3.6V DC for digital part 3.3 to 4.7V DC for radio frequency part
CLDPS power consumption:	12mA @ Idle 110mA @ 115 KBd 300mA @ 500 KBd
Frequency:	1.88 to 1.9GHz
Transmit power:	250mW max.
Data rate:	Up to 500Kbps with CLDPS
Standards:	EN 300 175 (DECT Common Interface) ETS 300 651 (Data Services DSP C.2)
Certification:	EN 301 406 (TBR6 2nd edition) EN 60 950/2000 (safety) ETS 301 489-6 (EMC)
Approval:	ETSI (EU)
Interface:	50-pin system interface
Data interface:	RS-232, 3.3V, up to 115.2KBd RTS/CTS Handshake
Modem lead signals:	RTS/CTS, DTR/DSR, DCD, RI
I/O interface:	General purpose I/O pins
Analogue interface:	Microphone, speaker, ringer
Other interfaces:	PCM, I2C, bus interface
Antenna system:	2 integrated antennas, External antenna connector (solder pads)
Range:	Up to 300m (outdoor), up to 60m (indoor)

