Lantiq™ COSIC™ Family
Flexible and Efficient Single Chip Solution for DECT/CAT-iq™ Applications

PSTN Cordless Phone Solution with Cosic ULC

- Base Station
  - Cost optimized PSTN base station
  - Support for DECT-EU, DECT6.0
  - Line interface supporting various country standards
  - 2 PCB layers
- Handset
  - Budget LCD (star burst or dot-matrix types)
  - Half duplex handsfree mode
  - 12 hrs talk time / 150 hrs standby time
  - 2 PCB layers

PSTN Cordless Phone Solutions with COSIC DTAM/PLUS

- Basestation, COSIC DTAM:
  - Cost optimized DTAM PSTN base station
  - Support for DECT-EU, DECT6.0, Japanese DECT, Korean DECT
  - Line interface supporting various country standards
  - 2 PCB layers
  - DTAM remote and local control
  - Keypad and display interface
  - Microphone for message recording
  - Speaker for call screening
  - Midi ring tones
  - Variable DTAM recording times (default: up to 18 mins / 4 MBit flash)
- Handset, COSIC PLUS
  - Support for budget LCD (dot-matrix types) or full graphic display variants
  - Full duplex handsfree mode
  - Midi tone ringer
  - 12 hrs talk time / 150 hrs standby time
  - 2 PCB layers
  - CAT-iq compliant, can be used in combination with COSIC Modem at gateway side
  - G.722 wideband support for HD audio quality

The Lantiq™ COSIC™ Family enables optimized DECT/CAT-iq™ handset and base station designs for standard PSTN applications. COSIC PLUS in addition supports CAT-iq, so it can be used for handsets connected to VoIP gateway with integrated CAT-iq basestation. Supporting all relevant standards like DECT, DECT6.0 (for North America Region), Korean DECT and CAT-iq™, the COSIC™ is the true single chip solution for cordless with global frequency coverage.

Integrating the baseband controller, RF transceiver and power amplifier on silicon, COSIC™ provides the pre-requisite for:
- Lowest system Bill of Material (BOM) cost
- Optimized PCB footprint
- Very Low power consumption
- HD Audio Quality

The COSIC™ family contains several derivatives based on the modular hardware and software approach.

COSIC™ ULC for low cost PSTN solutions, the powerful DTAM base station single chip COSIC™-DTAM, the all-round handset device COSIC™ PLUS for both PSTN and broadband applications are providing a wide range of options for DECT/CAT-iq™ system designs with minimized development effort.

COSIC™ is the perfect choice for the latest CAT-iq™ compliant products. The COSIC™ PLUS is optimized for the premium handset features like color display, wideband sound, full-duplex hands free speaking and low bit rate data support. Furthermore the latest COSIC™ solutions offer HD audio quality.

Lantiq™ COSIC™ Family

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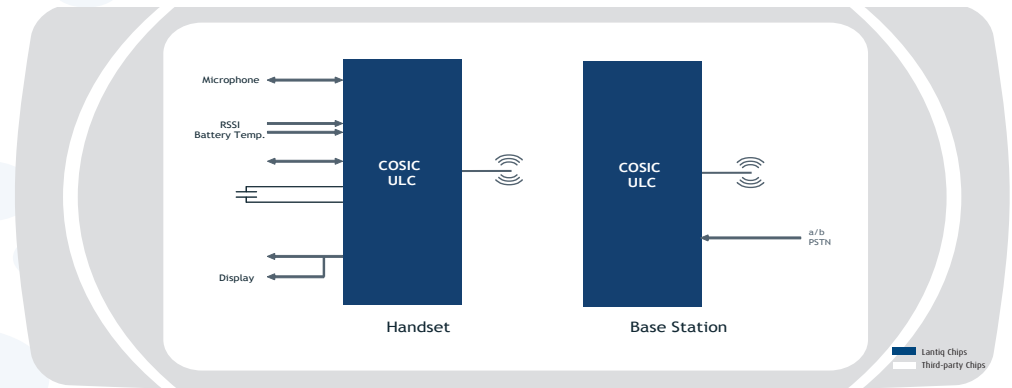
CAT-iq™ Handsets Reference Design:

- Full-Duplex Wideband hands-free speaking
- 1.7" Color LCD Display
- Software Upgrade Over The Air (SUOTA)
- No Emission Mode (NEMO)
- Phone Book Synchornization
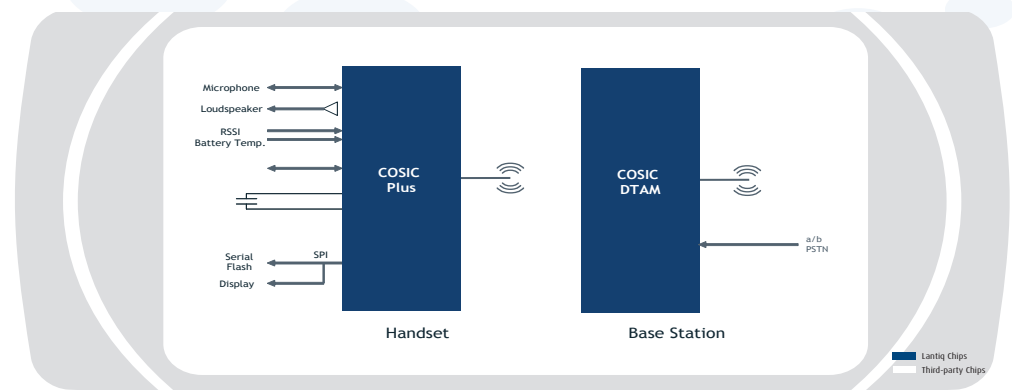- Online applications based on standard data channel

Software makes the Difference – Lantiq DECT IAD Software Suite

- Complete solution portfolio from Linux® BSP to reference designs
- Focused effort addressing time-to-market requirements
- Supported by years of telecom experience

Application Example: COSIC ULC for lowest cost DECT basestation and handsets

Microphone
RSSI
Battery Temp.

COSIC ULC

COSIC ULC

a/b PSTN

Display

Handset

Base Station

Lantiq Chips
Third-party Chips

Application Example: COSIC DTAM for powerfull basestations and Cosic Plus for all-around handsets

Microphone
Loudspeaker
RSSI
Battery Temp.

COSIC Plus

COSIC DTAM

a/b PSTN

Serial Flash
SPI
Display

Handset

Base Station

Lantiq Chips
Third-party Chips

Product Summary

Sales Code	Product Name	DECT/ DECT6.0	DECT 1.7GHz	CAT-Iq™	Package
PMB 9600	COSIC-ULC: DECT Handset	X			Bare-die
PMB 9610	COSIC-ULC: DECT Base Station	X			Bare-die
PMB 9616	COSIC-DTAM: Base with answering machine and Speaker/MIC	X			Bare-die / VQFN-108
PMB 9617	COSIC-DTAM KDECT: Base with answering machine and speaker/MIC		X		Bare-die / VQFN-108
PMB 9603	COSIC-PLUS: DECT/CAT-iq™ Handset	X		X	Bare-die / VQFN-108
PMB 9607	COSIC-PLUS KDECT		X	X	Bare-die / VQFN-108

Linux® is registered trademark of Linus Torvalds
CAT-iq™ is the registered trademark of the DECT Forum.
CAT-iq™ is the new global technology for broadband home connectivity.
ULC: Ultra Low Cost
DTAM: Digital Telephony Answering Machine