Voice System Overview

iS3000 / SIP@Net

Board usage

- Substructure equipment
- Operator consoles
- Trunk to public network
- Trunk to private network
- Special peripheral trunk

Digital trunks: E1, PRI, QSIG, DPNSS, CAS basic

- Analog trunks: 4w E&M
- Digital trunks: E1, PRI, QSIG, DPNSS, CAS basic

LAN

Board usage

- Connectors
- Rack design
- Power supplies

Dispatcher application

1...4 shelves possible

TCP/IP trunks

Analog trunks (the EAM)

Call recording for important transactions

Computer Telephony Integration (CTI)

- PC-based operation of telephone services
  - Call handling, call distribution, call queues, call forward, call logs etc.
  - Search and dial from directory
  - Touch screen based disposition
  - Direct interface for CTI (SIP)

Remote subscribers

- PSTN, ISDN, CAS over fiber optics
- 2-wire over fiber optics
- Power line 2-wire remote subscriber

Complementing communication solutions

Multimedia platform for utilities

The FOX family of equipment forms an important part of ABB's comprehensive range of utilities' communications. As a turnkey provider, ABB has solutions for all kinds of communication requirements. The following list summarizes the portfolio, which complements the FOX family in a perfect way.

- ABB's FOX family has a long tradition of stand-alone teleprotection devices. The latest generations of FOX devices feature highly reliable protection signaling over a wide choice of media (digital and analog/digital interfaces).

Management system

IP control, TDM-enabled solution

1...3 shelves possible in combination with 1 or 2 servers for redundancy

Infrastructure

Distribution

IP control, TDM enabled solution

1...3 shelves possible in combination with 1 or 2 servers for redundancy
Main Features

System
- Up to 5 PBXs with 60’000 extensions
- Fully integrated high density DECT system
- Flexible installation
- Call control & CTI solution
- Automated call distribution
- Voice mail system
- Automated anacron functions
- Dynamic call switching
- Voice mail system
- Automated anacron functions
- Dynamic call switching
- VOIP solution
- Next generation DECT system
- Based on international standards
- DECT roaming within the entire network
- Priority calls, break-In, forced release
- Various networking capabilities (DPNSS, QSIG)
- Free numbering scheme for small and large systems
- Test calls
- Flexible licence mechanism
- File management/backup on flash memory or hard disk
- System configuration without operation interruption

Maintenance
- Voice mail system
- Automatic call distribution
- Flexible management
- System

Conform to the European directive  91/263/EEC:
- EM Compatibility
- 19" shelf 400x483x409 (9U)/15 kg

Conform to the European directive 73/23/EEC:
- Power consumption per system max. 1'200 W
- Peripheral module 1...4
- Server 99.999 %
- iS3000 99.97 %
- System availability

Quality Standard ISO 9001
- For each shelf 70 W (fixed)
- Power consumption
- Ground resistance max. 8
- Power supply

DECT mobile phones
- MTBF > 12 years
- Environment EN 300 019
- Safety EN 60950
- Power supplies +5 VDC, -5 VDC, -48 VDC, 75 VAC/25 Hz
- Max. line current 35 mA
- Impedance 600
- Number of interfaces 16/32
- Number of base station interfaces 8
- Modes 1B, 1 x 64 kBit/s channel
- Number of speech channels 30
- DECT mobile interfaces
- Data transfer rate < 552 kb/s
- Encryption of voice data
- Seamless hand over
- RAP Radio Local Loop Access Profile
- MC  Multi Carrier
- GIP  GSM/DECT Interworking Profile
- PWT Personal Wireless Telephony (North America)
- FP  Fixed Part
- DECT (Digital Enhanced Cordless Telephony)
- DECT terminology

Coverage and speech quality in open environment
- 6 = No speech at all
- 5 = Very poor (unintelligible)
- 2 = good (Occasionally a click)
- 1 = very good

DECT mobile phones
- Typical radio coverage radius Confined offices: 20 - 50 m
- Number of radio channels 6/12 channels
- B706 / 712
- Remote powering line length Up to 2’000 m
- Number of assigned phone numbers Up to 512 (concentration mode)
- Number of speech channels 30
- DECT terminology
- Data transfer rate < 552 kb/s
- Encryption of voice data
- Seamless hand over
- RAP Radio Local Loop Access Profile
- MC  Multi Carrier
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VoIP solution
- High SIPP/SPF or VoIP call server
- High performance, super high density solutions
- SIP presence (Standard SIP => IS3000 features)
- SIP war, peer to peer connection
- Video phone [H.323]
- Panasonic
- iS3000 (IP) E1 Trunk Interface Signalling (ECSI) IP Trunking into IS3000 PBX
- IP-SPF/IPSP
- IS3000 (SIP) E1 Trunk Interface Signalling (ECSI) IP Trunking into IS3000 PBX
- IS3000 (SIP) E1 Trunk Interface Signalling (ECSI) IP Trunking into IS3000 PBX
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- Futureproof, open standards-based solutions
- Hybrid TDM/IP PBX or VoIP call server
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