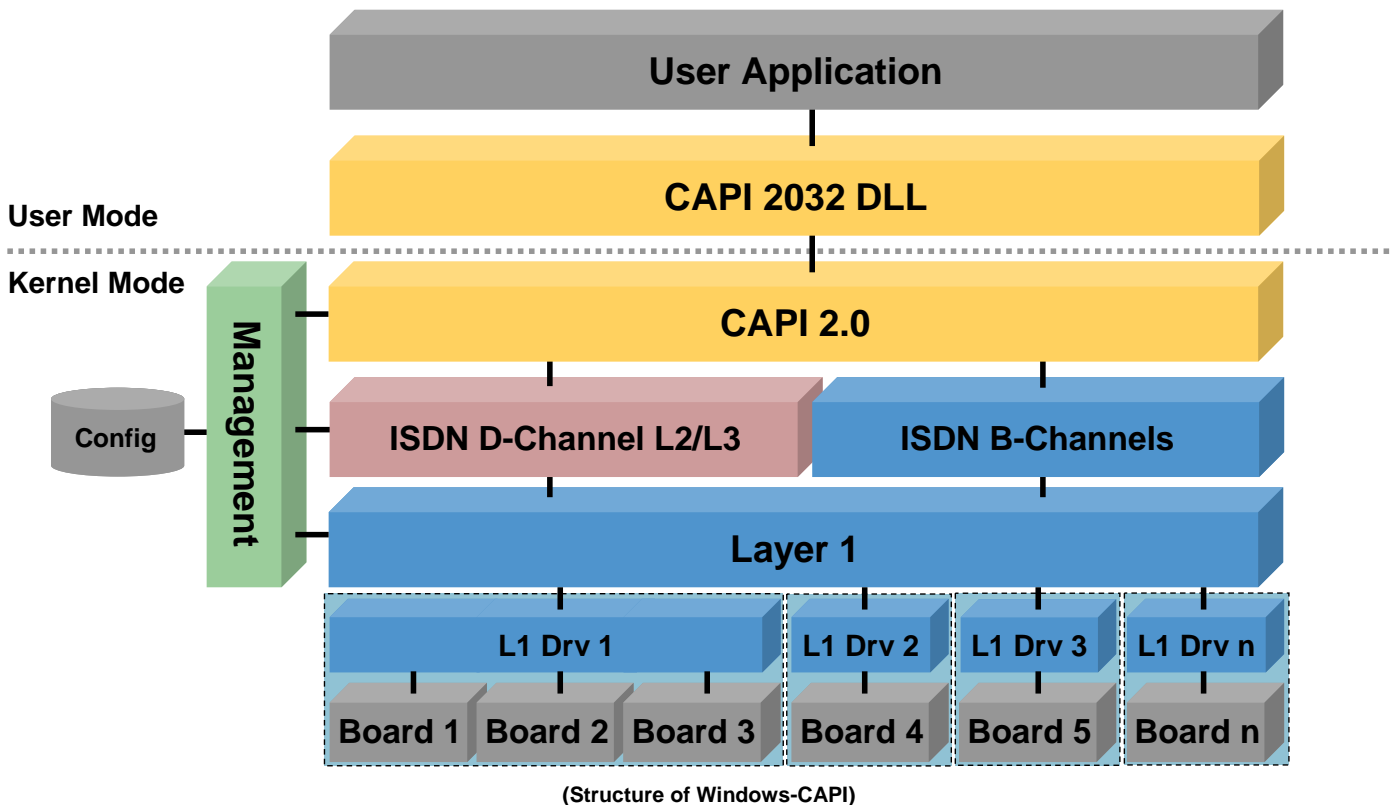


ISDN-CAPI Solution

Board Drivers and CAPI 2.0 for Windows and Linux (CAPI4Linux)



General

ikon offers for various ISDN Boards, a combination of Firmware (for active Boards), Layer 1 Board Drivers (L1 Drv) and ISDN Protocol Stack including CAPI 2.0 (also on Driver level) for Windows and Linux (CAPI4Linux compatible).

Thanks to the modular structure of the Software only the Layer 1 Board Driver, or, the Layer 1 Board Driver together with CAPI including ISDN Protocol Stack, may be used.

The Layer 1 Board Driver without CAPI is interesting e.g. for the implementation of non-ISDN Protocols on the E1 Interface. At the ISDN Primary Rate Interface the usage including ISDN Protocol Stack and CAPI 2.0 is of interest.

For the support of ISDN Interworking the ikon VoIP-CAPI also uses the Layer 1 Board Drivers.

With the ISDN-CAPI conforming to CAPI4Linux a Standard based Application Programming Interface for ISDN Boards is available now.

The CAPI4Linux Package is already part of the actual SUSE distribution and CAPI Applications are

also already available. Starting with Linux Kernel Release 2.6 CAPI 2.0 is the standard Mechanism for Applications to access the ISDN. The ikon CAPI4Linux Solution allows the Integration of standard Basic Rate and Primary Rate Interface Boards.

The ikon ISDN-CAPI Solution for Linux contains a CAPI4Linux Driver and a loadable Firmware for active ISDN Boards. After installation of the ikon ISDN-CAPI Solution CAPI Applications as well as ISDN4Linux applications may be used. The Linux PPP and TCP/IP Stack are also integrated.

The ikon ISDN-CAPI Solution is already available for ikon and interphase Boards and it may easily be ported to other ISDN Boards. Therefore ikon offers a Project based Porting Service.

Technical Details of the ISDN-CAPI Solution

ISDN Features

- ISDN Protocols Euro-ISDN/DSS-1 according to ETS 300 402 and ETS 300 403 and QSIG.
- B-Channel Protocols transparent and HDLC transparent.
- Support of S0 Basic Rate and Primary Rate Interfaces.
- TE or NT configurable.

CAPI Features

- Basic Call according to CAPI 2.0, 4th Edition.
- Support of the services Speech, 3.1kHz Audio and Unrestricted Digital Information with the relevant B-Channel Parameters.
- Supplementary Services MSN/DDI, CLIP, Hold, Explicit Call Transfer and Redirecting Information.
- Line Interconnect and Conferencing based on Switch Hardware (incl. H.110 Integration) or based on Software.

Board Firmware for active Boards

- Available for Freescale (Motorola) PowerPC (e.g. MPC860 or MPC8260) based Boards.
- Internal HDLC controllers of the MCU are supported.
- Support of various ISDN Transceivers like e.g. Dallas or Infineon.
- Support of TDM Switch Hardware (e.g. Lucent Ambassador) incl. H.110.
- Support of Clock Distribution for Boards with several Interfacea.
- Based on ikonOS.

Planned Extensions

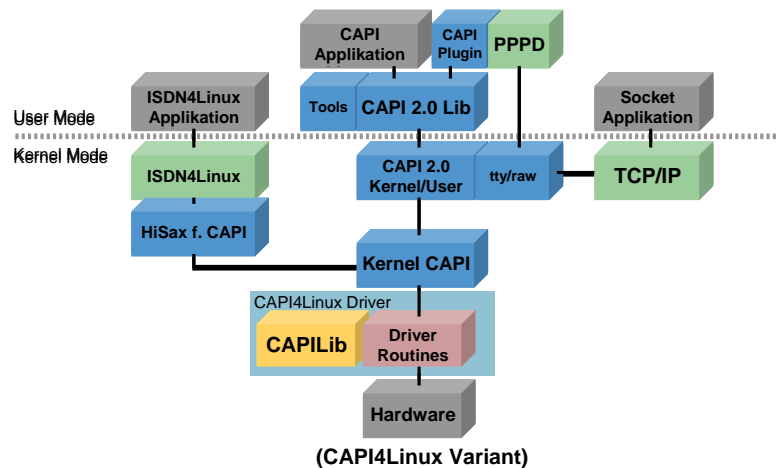
- SoftFax and DTMF send/receive.
- Integration of additional B-Channel Protocols like e.g. X.75.

Supported Boards

Among others several E1 Boards in PCI, cPCI and PMC form factor are supported, like e.g.

- **ikon PRI uno PCI** – semi-active PCI Board with DSPs and 1 E1 Interface.
- **ikon PRI quattro PCI** – active PCI Board with 4 E1 Interfaces and MPC8260 CPU.
- **ikon PRI quattro PMC** – active PMC Module with 4 E1 Interfaces and MPC8260 CPU.

- **ikon PRI otto cPCI** – active compact PCI Board with 8 E1 Interfaces, H.110 und MPC8260 CPU.
- **interphase iSPAN™ 5539F** – PCI Board with 4 E1 Interfaces.
- **interphase iSPAN™ 4538 / 4539 / 4539F** – PMC Modules with up to 4 E1 Interfaces.
- **interphase iSPAN™ 1635** – compact PCI Board with 8 E1 Interfaces.



ikon Portfolio (Excerpt)

- ikon▲ IP-DECT System**
- ikon▲ VoIP-CAPI**
- ikon▲ Various Protocol Stacks**
- ikon▲ Professional Services**

Brief Description of ikon GmbH

ikon GmbH delivers Products and Development Services with main Focus on Telecommunications. Since its Foundation in 1988 ikon GmbH is a reliable Partner for customer specific Development in the Telecommunication Sector.

Parts of our Product Portfolio are several Protocol Stacks and Software Modules for Technologies like ATM, DECT, ISDN, VoIP, Frame Relay, MPLS, IP-Routing and V5.x.

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