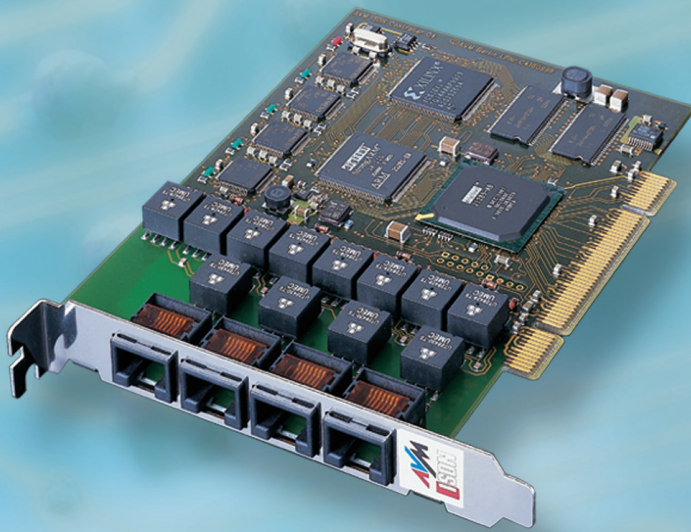


Whether for remote access, fax or e-mail; for access to a corporate LAN or to the Internet: AVM's proven system solutions integrate the full potential of ISDN communications for professional applications.



- **Active ISDN-Controller for servers with up to four BRI lines**
- **StrongARM CPU with 270 MIPS at 233 MHz; 16 MB SDRAM**
- **Digital and analog (fax/modem) communication, simultaneously**
- **Fax reception on all eight channels concurrently**

AVM ISDN-Controller C4

High-Tech ISDN

ISDN is the ideal medium for corporate communications. Fast, reliable and widely available, ISDN provides access to all communications services. Data, voice and networking services are integrated in ISDN. Companies' demands for powerful, reliable communications solutions are growing constantly. Internet access, fax servers, remote network access, multiprotocol routing—the requirements are both high and widely varied.

The AVM ISDN-Controller C4 is the ideal platform for all types of communication over ISDN. Four BRI lines provide up to eight simultaneous connections. Suited for all ISDN services, the C4 fulfills the most demanding tasks. State-of-the-art technology, a flexible architecture and years of ISDN expertise are the ingredients that comprise this ISDN-Controller.

Maximum Performance without Restriction

The AVM ISDN-Controller C4 is a PCI plug-in adapter for PCs, connecting the PC to up to four ISDN BRI lines. As an active ISDN-Controller—with its own high-powered CPU and memory—the C4 offers exclusive features. Communications protocol processing on the Controller itself reduces the burden on the host computer's CPU, as well as the memory requirements. Four S_0 interfaces on one card means that fewer bus slots, I/O addresses and interrupts are used than in a system with several single-line controllers. The C4 is suitable for use in the inter-networking field or as a platform for fax servers.

Hardware and Software Concepts

The AVM ISDN-Controller C4 is an active controller equipped with an extremely powerful RISC processor, a StrongARM SA110 clocked at 233 MHz. At this clock rate the CPU provides peak performance of about 270 MIPS.

The driver software for the AVM ISDN-Controller C4 conforms to CAPI 2.0. The software architecture is based on the ISDN Driver Model. Drivers are provided for the operating systems Windows Server 2003 (included 64-bit variation)/XP/2000 and NT, Novell NetWare and Linux, and for all specified interfaces.

The Controller can be used on standard point-to-multipoint ISDN lines with a variety of D-channel protocols. Furthermore, the Controller software supports use on point-to-point and leased lines. The AVM ISDN-Controller C4 is ideally suited for all ISDN communication services.



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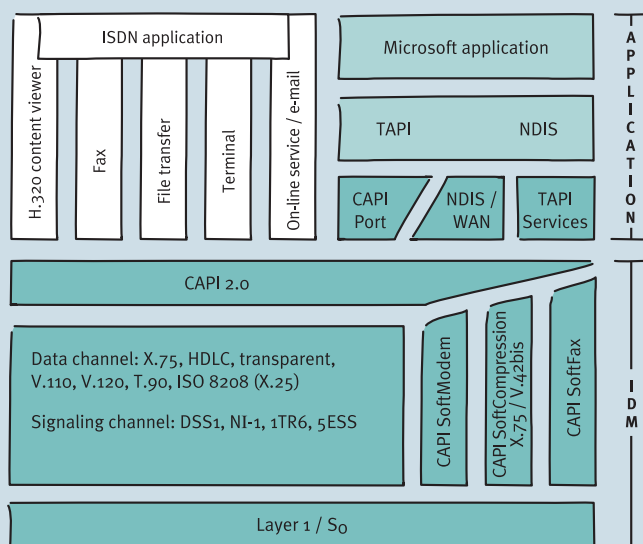
HIGH-PERFORMANCE COMMUNICATION BY ...



In addition to the digital data protocols, the AVM C4 supports all common analog communication types, including telefax. Supported digital protocols include X.75, HDLC transparent and X.31. The Controller also supports V.42bis data compression for X.75 connections. The C4's fax capabilities go beyond the customary V.17 standard (14,400 bit/s) to provide the latest data compression standards, two-dimensional MR/MMR and JBIG. Furthermore, fax transmission is secured using Error Correction Mode (ECM).

All-Purpose ISDN

The AVM ISDN-Controller C4 is the ideal solution for all those who need more than one BRI. Its exemplary support for practically all ISDN protocols ensures outstanding service in connections to ISDN, to other digital networks, to the analog telephone network and to GSM. Especially in server installations, the C4's powerful design exploits the full potential of ISDN. And the ability to install different



The AVM ISDN-Controller C4 also supports data connections to analog modems. This means that the AVM ISDN-Controller C4 can accept calls from systems connected to analog telephone lines—on all eight channels.

The ISDN-Controller is equipped with 16 MB SDRAM for software and data. Memory access takes place over a 32-bit bus to ensure unrestricted processing speed.

The Controller downloads its software from the host PC on start-up. This technique ensures that updates can be performed effortlessly at any time. In this way new features can be added to the existing controllers, and existing features can be improved, without touching the hardware.

The AVM ISDN-Controller C4 is connected to the PC through the PCI bus. The Controller is designed as a PCI bus master. This allows to take advantage of direct memory access (DMA)—transferring data to and from the PC memory without hindering CPU performance. Up to four C4 controllers can be installed in one PC. The PCI bus interface brings with it the additional advantage of automatic configuration. The individual modules on the Controller are interconnected by a 64-bit bus.

active AVM ISDN-Controller models in parallel ensures that the C4 will remain a versatile, integral part of an evolving data processing environment for years to come.

The C4's fax capabilities in particular permit applications such as fax servers or unified messaging systems with new, attractive features.

Technical Data

Features of the AVM ISDN-Controller C4 at a glance

- ISDN-Controller for BRI lines and the PCI bus
- One to four BRI's
- Active ISDN-Controller with its own CPU and memory
- High-performance StrongARM SA-110 processor with 270 MIPS at 233 MHz
- 16 MB SDRAM
- State-of-the-art technologies, including BGA devices, SDRAM, 3.3V supply voltage, etc.
- Low power consumption: about 3 W
- PCI Bus Master DMA: maximum throughput with minimum system load
- Suitable for all ISDN services:
 - Internet access
 - Internetworking
 - Remote access
 - File transfer
 - Fax
 - Voice
 - Video
 - Digital data communication with other networks
- Application interface Common-ISDN-API 2.0
- CAPI SoftCompression V.42bis and channel bundling in accordance with the CAPI specification
- CAPI SoftFax; telefax at 2400, 4800, 9600 and 14,400 bit/s
- CAPI SoftModem; connections with analog modems at 1200/75, 2400, 4800, 9600 and 14,400 bit/s
- Digital protocols:
 - X.75, HDLC transparent, bit-transparent, X.25, ISO 8208 (X.25 DTE-DTE), X.31 case a/b, T.70, T.90, Mobile ISDN (ISO 3309) incl. HSCSD support, V.110, V.120
- Analog protocols:
 - G3 fax (T.30, V.17, V.29, V.27ter), G3 Annex A (Error Correction Mode) and G3 Annex F (two-dimensional data compression)
 - Modem: V.21, V.22, V.22bis, V.32, V.32bis
 - DTMF recognition
- Support for point-to-point and leased lines
- Supplementary Services (such as Hold & Retrieve, Suspend & Resume (TP), 3PTY, ECT, ...)
- All protocols loadable as software on the controller
- AVM NDIS WAN CAPI Driver for Windows Server 2003 (x64), XP (x64), 2000 and Windows NT
- For Windows Server 2003 (x64), XP (x64), 2000, Windows NT, NetWare 4.x or higher and Linux (64 Bit included)
- Up to four ISDN-Controller C4s in one system
- International approvals

