Whether for remote access over GSM, fax, e-mail, access to the company's LAN or to the Internet—AVM's proven system solutions integrate all the possibilities of ISDN communication for professional applications in server or high-end workstation environments.



- StrongT multitasking RISC processor (50 MIPS)
- 1 MB SRAM on-board
- PCI bus-mastering DMA
- Complete CAPI 2.0 drivers for 12 operating systems
- Group 3 fax at up to 14,400 bit/s; plus ECM and MR/MMR
- Up to 4 ISDN-Controllers in one PCI system

AVM ISDN-Controller B1 PCI v4.0

AVM B1 PCI v4.0: High-Performance ISDN for BRI lines

The AVM ISDN-Controller B1 PCI v4.0 is the next logical advancement in the world's best-selling family of active ISDN-Controllers, the AVM ISDN-Controller B1 series. The success of AVM's B1 technology is no accident: Like its predecessors, the AVM ISDN-Controller B1 PCI v4.0 benefits from AVM's years of expertise with RISC processors. The heavy-duty StrongT processor, a completely new development by AVM, now creates a new performance class in active ISDN-Controllers for the BRI line, while guaranteeing full downward compatibility with existing AVM B1s.

Thanks to AVM's own StrongT processor in RISC architecture and 1 MB of local static RAM (SRAM), the B1 PCI v4.0 is equipped to make full use of the special advantages of the digital ISDN network—even in communications servers.

A Multitalented Family

The AVM concept for ISDN-based communications goes far beyond conventional PC solutions. As the leading manufacturer of PC ISDN adapters, AVM offers a family of ISDN-Controllers with a full suite of protocol software and of recognized quality. The AVM family of controllers ranges from high-performance active architectures for business users to powerful passive controllers, such as FRITZ!Card, for SOHO users. The attractive portfolio of complete PC communications solutions is rounded out by highly versatile USB-based products, such as FRITZ!X USB, and by powerful controllers for ADSL, GSM and the new Bluetooth local wireless technology.

No matter what bus system you want to use—whether PCI, USB, ISA/EISA, or your notebook's PCMCIA slot—with AVM's ADSL and ISDN-Controllers all your options are open.

The AVM ISDN-Controller B1 PCI v4.0

The AVM ISDN-Controller B1 PCI v4.0 has an $\rm S_0$ interface for the ISDN BRI and is designed for simultaneous processing of two 64-kbit/s data channels.

The 50-MIPS StrongT multitasking RISC CPU, developed by AVM, is the controller's central component and the cornerstone of its extremely high capabilities. The AVM ISDN-Controller B1 PCI v4.0 provides high-speed data communication, network and host connectivity, and G3/G4 fax, while minimizing the burden on the host system through PCI bus-mastering DMA. The uncompromising high-performance architecture permits on-the-fly V.42bis data compression over X.75 connections for data rates of up to 550 kbit/s.

Another special feature: The B1 PCI v4.0 supports Group 3 (G3) fax connections to the analog world at speeds of up to 14,400 bit/s, with ECM (Error Correction Mode) and MR/MMR (two-dimensional compression) included. And both B channels can be used simultaneously.





Standard equipment in the AVM ISDN-Controller B1 PCI v4.0 package includes the ISDN file transfer programs Connect2/32 (compatible with FRITZ!data and IDtrans), the AVM NDIS WAN CAPI Driver and the AVM CAPI Port Driver for Windows XP, 2000, NT, Me, 98, 95. The package also includes the AVM ISDN TAPI Services for CAPI, to support the use of TAPI 2.1-based telephony applications such as MS Outlook in Windows XP, 2000, NT, Me and 98. The TAPI Services for CAPI also permit the use of the ISDN line by Windows XP's and 2000's integrated

Special Features of the AVM ISDN-Controller B1 PCI v4.0

- StrongT multitasking RISC processor (50 MIPS); 1 MB of SRAM on-board
- Bus-mastering DMA for optimum system integration
- Designed for full data loads on both B channels
- Plug&play installation in accordance with the PCI 2.1 specification
- V.42bis data compression available

Full Compatibility

The new AVM ISDN-Controller B1 PCI v4.0 is fully compatible with its predecessor, the B1 PCI. Existing CAPI 2.0 application software for the B1 PCI works with the B1 PCI v4.0. All ISDN applications can continue in use without modification, and benefit from the B1 PCI v4.0's enhanced features. The ISDN-Controller is completely CAPI 2.0-compliant.

ISDN application Microsoft application H.320 content viewer e-mail TAPI NDIS File transfer On-line service / Fax NDIS TAPI Port WAN Services CAPI 2.0 SoftFax CAPI SoftModem Data channel: X.75, HDLC, transparent, V.110, V.120, T.90, ISO 8208 (X.25) CAPI Signaling channel: DSS1, NI-1, 1TR6, 5ESS Layer 1 / So

fax services, MS Small Business Server 2000 (SBS) and Back Office Server 2000 (BOS).

CAPI 2.0 Support in All Popular Operating Systems

Like all AVM ISDN-Controllers, the new B1 PCI v4.0 supports the standardized applications interface COMMON ISDN API (CAPI 2.0). This means all commercially available ISDN applications can address the ISDN-Controller B1 PCI v4.0 directly through this interface and are thus automatically compatible. The AVM B1 PCI v4.0 features a wide range of drivers to support nearly all leading PC operating systems: Windows Server 2003, XP, XP 64-Bit, 2000, NT, Me, 98, 95 and 3.x; Novell NetWare 6.x, 5.x, 4.x and 3.12; Linux, OS/2 and MS-DOS are supported directly.

Reliable Operation through Broad Compatibility and Certification

The B1 is certified by Windows Hardware Quality Labs (WHQL), and for NetWare 6.x, 5.x and 4.x by Novell Labs. The DTS seal attests broad compatibility with standard Group 3 fax devices. The B1 is also directly certified for operation with Lotus Notes. Explicit certification has also been given by the manufacturers of many software packages, such as David and WinFax PRO.

- For use in a wide variety of operating systems (Windows Server 2003, XP, XP 64-Bit, 2000, NT, Me, 98, 95 and 3.x; Novell NetWare 6.x, 5.x, 4.x and 3.12; Linux, OS/2 and MS-DOS)
- D-channel driver software loadable for E-DSS1 (Euro-ISDN), 1TR6, NI-1, 5ESS
- Group 3 fax at up to 14,400 bit/s; V.110 bit rate adaptation
- 32-bit device drivers for Windows NT, 95, 3.x
- 32-bit WDM driver for Windows XP, 2000, Me, 98
- Extensive system driver suite available; Internet, RAS and telephony applications in Windows XP, 2000, NT, Me, 98, 95
- Package includes Connect2/32 file transfer software and comprehensive system drivers for full ISDN integration in Microsoft operating systems, including the AVM NDIS WAN CAPI Drivers (Windows XP, 2000, NT, Me, 98, 95), the AVM ISDN CAPI Port driver (Windows XP, 2000, NT, Me, 98, 95) and AVM ISDN TAPI Services for CAPI (Windows XP, 2000, NT, Me, 98)
- Up to four ISDN-Controllers installable in one PC, including mixed configurations with AVM ISDN-Controller models B1 v2.0, B1 v3.0, B1 PCI, B1 USB, C2 and C4

Technical Data

- Internal ISDN adapter for the PCI bus (SMT construction)
- S₀ interface for BRI lines and PBX extensions
- StrongT multitasking RISC processor (50 MIPS)
- 1 MB SRAM (static RAM) on-board
- PCI bus-mastering DMA; up to four controllers per system
- Throughput: 2 x 64 kbit/s and 1 x 16 kbit/s
- Full downward compatibility with the AVM ISDN-Controller B1 PCI
- Drivers provide D-channel (DSS1, 1TR6, NI-1, 5ESS) and B-channel protocols: X.75, T.70, T.90, X.31 (Cases A and B), T.30 (Group 3 fax), V.110, V.120, HDLC
- Group 3 fax (incl. fax polling) at up to 14,400 bit/s on both B-channels simultaneously; ECM and MR/MMR included
- Also implemented: DTMF, secured data connections to GSM terminal equipment (mobile phones etc.), incl. V.42bis data compression and OS-dependent support for CAPI 1.1 applications
- Standardized programming interface COMMON ISDN API 2.0
- Supplementary Services available in conformance with CAPI 2.0
- Short card: approx. 146 x 120 mm (incl. back plate)
- Power consumption: about 2 W
- 5-year limited hardware warranty
- Free driver support through AVM Data Call Center (BBS) and WWW server
- Approvals and certifications (selection): CE; EMC-tested per EN 55022/ 4.1987 and EN 50082-a.1992; electrical safety (TÜVtested design) per IEC 950, EN 41003, EN 60950, VDE 0804, VDE 0805

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