Sangoma A108D PCI PRI ISDN Card

Product Name: Sangoma A108D PCI PRI ISDN Card
Manufacturer: Sangoma
Model Number: A108D

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The A108D PCIx has hardware based echo cancellation across 240 channels
An Advanced Flexible Telecommunications (AFT) card with eight T1/E1 or fractional T1/E1 ports, supporting multiple DS0 channels of HDLC or non HDLC data. Used to support WANPIPE® in multichannel hub configurations, and as T1/E1 voice gateways for PBX systems.Sangoma A108D Key Features

• Eight port T1/E1/J1 card.
• Dimensions: 2U Form factor: 120mm x 55 mm for use in restricted chassis.
• 32 bit bus master DMA data exchanges across PCI interface at 132Mbytes/sec for minimum host processor intervention.
• Ring buffer DMA handling for minimum host intervention and guaranteed data integrity on high volume systems.
• Intelligent hardware: Downloadable Field Programmable Gate Array programming with multiple operating modes. Allows new features related to voice and/or data to be added when they become available.

Guaranteed to work with Asterisk. All Sangoma Products are protected by a 30 Day Money Back Guarantee
The sandwich DSP card on the "d" model features Octasic's certified carrier-grade algorithms providing carrier grade echo cancellation and Voice Quality Enhancement (VQE) functions. Supporting 32-672 channels G.168-2002 echo cancellation, a minimum of 1024 taps for a 128ms tail/channel on all channel densities, the system also supports Octasic music protection, acoustic echo control and adaptive noise reduction. The "d" model also features on-board DTMF decoding and tone recognition.
The A108 is the, eight port version of Sangoma's range of Advanced, Flexible a104, DSP, TDM voiceTelecommunications (AFT) hardware designed for optimum support of voice and data over T1, E1 and J1.
The A108 provides full speed 132 Mbps PCI bus transfer with FPGA and DSP based processing to unload the host CPU in demanding environments such as soft PBX/IVR voice applications. Compatible with both the 3.3v and 5v PCI bus, A108 cards operate in all commercially available motherboards sharing IRQs properly with themselves and all other PCI compatible devices, so you never have to worry about hardware compatibility issues.
Like all the Sangoma AFT Series, the A108 is field upgradeable to take advantage of the hardware and software improvements as they become available.
Operational Modes
Voice modes:

• The A104 and drivers fully support TDM voice gateways for the Asterisk® , YateT , OPALT PBX/IVR projects, as well as other Open Source and proprietary PBX/Switch/IVR/VoIP gateway applications.
• Supports Robbed Bit Channel Associated Signaling (CAS) and ISDN PRI.
• Optimized per channel DMA streams and hardware-level HDLC handling unload the host CPU.
• EDACT (patent pending) technology is integrated to drastically reduce the load due to software echo cancellation, which is the largest component of CPU load in a typical soft PBX system.
• Field upgradeable hardware allows for new TDM-related functions to be added as they become available.

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Data only:
T1/E1 and fractional T1/E1, single channel HDLC per line. Full channelized mode to act as major network hub for sub-DS1 remotes. The A108 can support any configuration of up to 124 remote 64kbps connections carrying Frame Relay, PPP or HDLC data. Timeslots can be concatenated to support remote fractional T1/E1/J1 sites in any combination.
Mixed Voice/Data mode:

• Robust combination of router/PBX functions in one server.
• WAN data connection is supported by Sangoma's standard WANPIPE® routing stack , completely independently of TDM voice application for total system reliability.
• WANPIPE® supports certified, field tested and reliable Frame Relay, PPP, HDLC and X.25.

Sangoma A108D - Technical Specifications
General Features

• Eight port T1/E1/J1 card.
• Dimensions: 2U Form factor: 120mm x 55 mm for use in restricted chassis.
• 32 bit bus master DMA data exchanges across PCI interface at 132Mbytes/sec for minimum host processor intervention.
• Ring buffer DMA handling for minimum host intervention and guaranteed data integrity on high volume systems.
• Intelligent hardware: Downloadable Field Programmable Gate Array programming with multiple operating modes. Allows new features related to voice and/or data to be added when they become available.
• DSP card on the A108d: - G.168-2002 echo cancellation in hardware - 1024 taps/128ms tail per channel on all channel densities - DMF decoding and tone recognition - Voice quality enhancement: Octasic music protection, acoustic echo control and adaptive noise reduction.
• Power: 800mA peak, operational 300mA max at +3.3v or 5v.
• Autosense compatibility with 5v and 3.3v PCI busses.
• Temperature range: 0 - 50C.
• Line decoding: HDB3, AMI, B8ZS.
• Framing: CRC4, non-CRC4, ESF, D4T1/E1.
• Clocking mode: Normal, Master.

T1/E1 Status alarms

• ALOSV: Loss of Signal alarm
• LOS: Receive Loss of Signal
• ALTLOS: Alternate loss of Signal Status
• OOF: Out of Frame
• RED: Telco Red Alarm condition
• AIS: Alarm Indication Signal
• OOSMFV: Loss of Signaling Multiframe
• OOCMFV: Loss of CRC Multiframe
• OOOFV: Out of Off-Line Frame
• RAIV: Receive Loss of Signal
• YEL: Receive Telco Yellow Alarm

Line protocols

• Frame Relay, X.25, HDLC, PPP, SS7, Transparent bit-stream, BSC.

Operating systems

• Linux (all versions, releases and distributions from 1.0 up)

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Price: £1,557.03