

## Sangoma A101E PCI Express PRI ISDN Card



Product Name: Sangoma A101E PCI Express PRI ISDN Card

Manufacturer: Sangoma

Model Number: A101E

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Please Note: This is a PCI Express Card. Please make sure your motherboard/server is compatible with this product.

[View PCI vs PCI-Express example](#)

Introducing the industry's first affordable single port T1/E1/J1 card with available Telco-grade hardware echo cancellation. The A101E is designed for optimum voice support for smaller systems. Sangoma A101E Key Features

- One T1/E1 port with optimum PCI Express or PCI interface for high performance voice and data applications.

- Line decoding: HDB3, AMI, B8ZS.

- Framing: CRC-4, Non CRC4, SF, D4. Also compatible with Japan's J1.

- Support for Asterisk™, Yate™, and FreeSwitch™ PBX/IVR Projects, as well as other open source and proprietary PBX/Switch/IVR/VoIP gateway applications.

The Sangoma A101E is part of Sangoma's family of Advanced Flexible Telecommunications hardware product line it uses the same high-performance PCI or PCI Express interface that is providing superior performance in critical systems all over the world.

The A101E supports up to 2.048 Mbps of full duplex data through-put or up to 30 voice calls over a single T1, E1, or J1 line.

With Sangoma cards, you can always take advantage of hardware and software improvements, as soon as they become available. The A101, like all cards in Sangoma's AFT family, is field upgradeable with crash-proof firmware.

Choose the Sangoma A101D and A101D-X cards with Octasic's DSP hardware and certified algorithms to achieve carrier-grade echo cancellation and Voice Quality Enhancement functions on your open source or even proprietary telephone system.

Sangoma A101E - Technical Specifications

#### General Features

- One T1/E1 port with optimum PCI Express or PCI interface for high performance voice and data applications.

- Line decoding: HDB3, AMI, B8ZS.

- Framing: CRC-4, Non CRC4, SF, D4. Also compatible with Japan's J1.

- Support for Asterisk™, Yate™, and FreeSwitch™ PBX/IVR Projects, as well as other open source and proprietary PBX/Switch/IVR/VoIP gateway applications.

- All of Sangoma's AFT products use the same base PCI interface card and the same professionally engineered firmware on the same family of Field Upgradeable Gate Arrays.

- Fully compatible with all commercially available motherboards proper PCI-standard interrupt sharing without manual tuning.

- A101-X and A101D-X PCI Express: 1 Lane PCI Express bus.

- Dimensions: 2U Form factor: 120 mm x 55 mm for use in restricted chassis.

- Includes high quality, tested RJ45 cables and short 2U mounting clips for installation in 2U rack mount servers.

- Power: 800 mA peak, operational 300 mA max at +3.3 V or 5 V.

- Temperature range: 0-50 °C.

- Autosense compatibility with 5 V and 3.3 V PCI busses.

- Intelligent hardware: Downloadable FPGA programming with multiple operating modes. Add

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new features related to voice and/or data when they become available.

• 32-bit bus master DMA data exchanges across PCI interface at 132 Mbytes/sec for minimum host processor intervention.

• Ring buffer DMA handling for minimum host intervention and guaranteed data integrity on high volume systems.

• Supports Robbed Bit Channel Associated Signaling (CAS) and ISDN PRI.

• T1/E1 and fractional T1/E1, multiple channel HDLC per line for mixed data/TDM voice applications.

• Optimized per channel DMA streams and hardware-level HDLC handling unload the host CPU.

• Use raw bitstream interfaces to support arbitrary non-standard line protocols, such as non-byte aligned monosynch or bisynch.

• WANPIPE®; routing stack is completely independent of TDM voice application for total system reliability.

• WANPIPE®; supports certified, field-tested, and reliable Frame Relay, PPP, HDLC, and X.25.

### Optional DSP daughterboard on the A101D

• G.168-2002 echo cancellation in hardware.

• 1014 taps/128ms tail per channel on all 256 channels.

• DTMF decoding and tone recognition.

• Voice quality enhancement: Octasic music protection, acoustic echo control, and adaptive noise reduction.

### Operating systems

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

• Windows NT/2000/XP.

• FreeBSD, Open BSD, NetBSD, Solaris.

### Voice applications

• Asterisk™, Yate™, Open PBX/IVR, FreeSwitch™, TrixBox™, as well as proprietary applications.

### Line protocols

• FCC Part 15 Class A, FCC Part 68, CISPR 22, EN 55022, Class A, CIPSR 24, AFIC-2016, IEC 60950.

• Technical certifications in Russia, Malaysia, and Australia.

### Higher level protocols

• IP/PX over Frame Relay/PPP/HDLC/X.25, X.25 over Frame Relay (Annex G), BSC over X.25 (D.T. and TOP), SNA over X.25, PPPoE, PPPoA, IP over ATM.

### Diagnostic tools

• WANPIPEMON, SNMP, System logs

### Higher level protocols

• IP/PX over Frame Relay/PPP/HDLC/X.25, X.25 over Frame Relay (Annex G), BSC over X.25 (D.T. and TOP), SNA over X.25, PPPoE, PPPoA, IP over ATM.

## Sangoma A101E PCI Express PRI ISDN Card

### T1/E1 Status alarm

½ RED: Telco Red Alarm Condition.

½ OOF: Out of Frame.

½ LOS: Receive Loss of Signal.

½ AIS: Alarm Indication Signal.

½ RAI: Remote Alarm Indication (Yellow Alarm).

### Certification

½ FCC Part 15 Class A, FCC Part 68, CISPR 22, EN 55022 Class A, CIPSR 24, AFIC-S016, IEC 60950.

½ Technical certifications in Russia, Malaysia and Australia

### Production quality

½ ISO 9002

### Warranty

½ Five years parts and labor.

½ PLUS 30-day "no questions asked" return policy.

**Price: £416.30**

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