Digital PRI Telephony Cards

*A104

Get 1, 2, 4, 8 or 16 Ports of Optimized Voice & Data Over E1/T1

Choose between our 1,2,4,8 and even 16 ports of our award-winning interface cards optimized for voice and data applications. From 30 to 480 simultaneous calls, all supported on a single PCI/PCIexpress interface, is powering leading PBX, IVR and call center applications.

Quick Facts

- 1-16 Ports of E1/T1 on a single PCI / PCIe Interface
- Optional Telco Grade Echo Cancellation
- Onboard Diagnostic & Debugging Toolkit
- Compatible with Most Motherboard, Linux & Windows Operating Systems
- Plug&Play with PBXact UC & FreePBX
- Lifetime Warranty on Parts & Labor

Sangoma telephony cards are compatible with virtually all Linux and Windows environments as well as standard servers. Included in thousands of worldwide projects, trust Sangoma analog cards for dependability, flexibility and interoperability. With lifetime warranty, you can't go wrong!

"Sangoma cards are guaranteed to work with FreePBX and PBXact UC systems with full plug&play support from the web GUI."

The open design architecture, along with our TDM APIs, allows for seamless integration for all your Voice, Data, SS7 and other proprietary applications.

Sangoma raised the bar in TDM voice communications with on-board, telco-grade, hardware echo canceller DSPs available on all voice cards and the most optimized, scalable, cross-platform device drivers available. The unique tuning option delivers up to 70% system performance increase, decreasing CPU usage, and allowing you to increase port density per server.

					
Digital E1/T1	**A101**	**A102**	***A104**	**A108**	**A116**
Number of Ports	1 E1/T1	2 E1/T1	4 E1/T1	8 E1/T1	16 E1/T1
Full Duplex Data Transfter Rate	2.048 Mbps or up to 30 voice calls	4.096 Mbps or up to 60 voice calls	8.192 Mbps or up to 120 voice calls	16.4 Mbps or up to 240 voice calls	32.8 Mbps or up to 480 voice calls
Voice Protocols	» PRI » CAS » MFC/R2 » SS7	» PRI » CAS » MFC/R2 » SS7	» PRI » CAS » MFC/R2 » SS7	» PRI » CAS » MFC/R2 » SS7	» PRI » CAS » MFC/R2 » SS7
WAN Protocols	ATM, Frame Relay, X.25, HDLC, PPP, Transparent Bit-stream & BSC	ATM, Frame Relay, X.25, HDLC, PPP, Transparent Bit-stream & BSC	ATM, Frame Relay, X.25, HDLC, PPP, Transparent Bit-stream & BSC	ATM, Frame Relay, X.25, HDLC, PPP, Transparent Bit-stream & BSC	ATM, Frame Relay, X.25, HDLC, PPP, Transparent Bit-stream & BSC

TECHNICAL SPECIFICATIONS

Interfaces

Telephony Interfaces:

- A101
  - 1 E1/T1 (30 channels)
- A102
  - 2 E1/T1 (60 channels)
- A104
  - 4 E1/T1 (120 channels)
- T1
  - NI1/NI2
  - AT&T 5ESS
  - CAS (RBS)
  - DMS100
  - ISO QSIG
  - SS7
- A108
  - 8 E1/T1 (240 channels)
- A116
  - 16 E1/T1 (480 channels)
- E1
  - Euro-ISDN
  - ISO QSIG
  - VN4
  - CAS R2MFC
  - SS7

PCI Interfaces:

- PCI or PCI Express
- Fully PCI 2.2 compliant, compatible with all commercially available motherboards, and shares PCI interrupts
- Autosense compatibility with 5 V and 3.3 V PCI busses
- Single synchronous PCI interface for all ports
- 32 bit bus master DMA data exchanges across PCI interface at 132 Mbytes/sec for minimum host processor intervention

Features

PBX Support:

- FreePBX, PBXact UC, Asterisk, FreeSWITCH...etc.

Operating System Support:

- Windows 2003, Windows XP, Windows Server 2008, Windows Vista, Windows 7
- Linux (All versions, releases and distributions from 1.0 up)

Server and Motherboard Support:

- Compatible with most commercially available servers and motherboards

DSP Echo Canceller *Optional:

- G.168-2002 echo cancellation in the hardware
- 1024 taps/128 ms tail per channel on all channel densities
- DTMF decoding and tone recognition
- Voice quality enhancement: music protection, acoustic echo control and adaptive noise reduction
- No CPU load as a result of echo cancellation
- Does not increase the physical size of the card, and no additional slot is required

Diagnostic Tools:

- WANPIPEMON
- SNMP
- System logs

Wiring Connections *Cables Included:

- A101 - A108
  - Standard E1/T1 pinouts on an RJ45 jack
  - 2m cables with RJ45 plugs, A108 supplied with 4 Y-cables (2 RJ45 plugs to 1 RJ45)
- A116
  - 68 pin SCSI type interface with RJ45 breakout panel

Hardware

Certification:

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

Environmental:

- Temperature range: 0 – 50 °C

Dimensions:

- A101 - A108
  - 2U form factor
  - 120mm x 55mm for use in restricted chassis
- A116
  - Full height by half length
  - 107mm x 176mm

Mounting:

- Includes both standard and short half-height compatible mounting clips for installation in 2U rack-mount servers
- Compatible with all commercially available motherboards

Power Supply:

- A101
  - PCI: 3 W (0.6 A @ 5 V)
  - PCI Express: 2.5 W (0.76 A @ 3.3 V)
- A102
  - PCI: 3.8 W (0.76 A @ 5 V)
  - PCI Express: 3.2 W (0.97 A @ 3.3 V)
- A104
  - PCI: 5 W (1 A @ 5 V)
  - PCI Express: 4 W (1.2 A @ 3.3 V)
- A108
  - PCI: 7.5 W (1.5 A @ 5 V)
  - PCI Express: 5.5 W (1.67 A @ 3.3 V)
- A116
  - 2A @ 3.3V, 0.1A @ 12V

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