



Digital PRI Telephony Cards

A101, A102, A104, A108, A116



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.

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 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 Cards

Models:

- > **A101** (1 E1/T1, 2.048 Mbps or up to 30 voice calls)
- > **A102** (2 E1/T1, 4.096 Mbps or up to 60 voice calls)
- > **A104** (4 E1/T1, 8.192 Mbps or up to 120 voice calls)
- > **A108** (8 E1/T1, 16.4 Mbps or up to 240 voice calls)
- > **A116** (16 E1/T1, 32.8 Mbps or up to 480 voice calls)

Voice Protocols:

- > PRI, CAS, MFC/R2, SS7

WAN Protocols:

- > ATM, Frame Relay, X.25, HDLC, PPP, Transparent Bit-stream & BSC

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

Quick Facts:

- > 1-16 Ports of E1/T1
- > Optional Telco Grade Echo Cancellation
- > Onboard Diagnostic & Debugging Toolkit
- > Compatible with Most Motherboard, Linux & Windows Operating Systems
- > Plug&Play with PBXact & FreePBX

Product Specifications

Interfaces	
Telephony Interfaces	
A101	1 E1/T1 (30 channels)
A102	2 E1/T1 (60 channels)
A104	4 E1/T1 (120 channels)
A108	8 E1/T1 (240 channels)
A116	16 E1/T1 (480 channels)
T1	NI1/NI2, AT&T 5ESS, CAS (RBS), DMS100, ISO QSIG, SS7
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, 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, CISPR 24, AFIC-S016, 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: 3W (0.6A @ 5V)
	PCI Express: 2.5W (0.76A @ 3.3V)
A102	PCI: 3.8W (0.76A @ 5V)
	PCI Express: 3.2W (0.97A @ 3.3V)
A104	PCI: 5W (1A @ 5V)
	PCI Express: 4W (1.2A @ 3.3V)
A108	PCI: 7.5W (1.5A @ 5V)
	PCI Express: 5.5W (1.67A @ 3.3V)
A116	2A @ 3.3V, 0.1A @ 12V