



# Analog Telephony Cards

A200, A400, B600

For many SMBs and SOHO businesses, analog telephone lines are still their primary method of accessing the PSTN. For over three decades, Sangoma has been providing the highest quality analog telephony cards for FreePBX, PBXact, Asterisk, and many other proprietary phone systems to connect to the PSTN.

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!

## Use Cases:

- › Channel banks
- › Small Office Home Office (SOHO) applications
- › SMB applications
- › Analog trunks
- › Loopstart / Kewlstart applications

## A200 & A400 Cards

Our A200 and A400 analog cards are scalable from 2-24 ports in a 2U form factor, per interface slot on the server. Simply add a Remora daughterboard to the base card to expand to up to 24 channels.

Modular design lets you choose between the interchangeable FXS or FXO modules to create your channel requirements.

## B600 Cards

For cost-conscious customers, our fixed density B600 analog card offers the same premium quality as our scalable cards, for smaller-budget installations.

The B600 offers 4 FXO ports and 1 FXS Port on a single interface. Connect your PBX to 4 POTS lines and 1 internal device, such as a fax machine, without configuring FXO/FXS modules.



\*A200

## The Highest Quality Analog Telephony Interface Cards

### Quick Facts:

- › 2-24 Ports of FXO / FXS (Scalable)
- › Optional Telco Grade Echo Cancellation
- › Onboard Diagnostic & Debugging Toolkit
- › Compatible with Most Motherboard, Linux & Windows Operating Systems
- › Plug&Play with PBXact & FreePBX
- › **A200 & A400:** Lifetime Warranty on Parts & Labor
- › **B600:** 5-Year Warranty on Parts & Labor

# Product Specifications

Interfaces	
<b>Telephony Interfaces</b>	
<b>A200 &amp; A400</b>	2-24 ports of FXO/FXS (Scalable)
<b>A200</b>	Up to 4 ports on base card
<b>A400</b>	Up to 12 ports per base card
<b>B600</b>	4 port FXO & 1 port FXS (Fixed density)
<b>PCI Interfaces</b>	
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	
<b>PBX Support</b>	
FreePBX, PBXact, Asterisk	
<b>Operating System Support:</b>	
Windows 2003, Windows XP, Windows Server 2008, Windows Vista, Windows 7	
Linux (All versions, releases and distributions from 1.0 up)	
<b>Server and Motherboard Support</b>	
Compatible with most commercially available servers and motherboards	
<b>DSP Echo Canceller *Optional</b>	
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	
<b>Diagnostic Tools</b>	
WANPIPEMON	
SNMP	
System logs	

Wiring Connections *Cables Included	
<b>A200 &amp; B600</b>	4-pin RJ11/4 narrow jacks
	4x 2m cables terminating in a narrow RJ11/4 plug at one end and a telephone-standard RJ11/6 plug at the other
<b>A400</b>	DB25 connection to an included standard 12-line
	Color-coded telephone cable that is ready for hardwiring into a punch block at the PSTN connection
Hardware	
<b>Certification</b>	
<b>A200</b>	FCC Part 15 Class A, FCC Part 68, EN 55022 Class A, ISO 9002
<b>A400</b>	FCC Part 15 Class A, FCC Part 68, CISPR 22, EN 55022, Class A, CIPSR 24, AFIC-S016, IEC 60950, ISO 9002
<b>B600</b>	FCC Part 15 Class A, EN 55022/24 Class A, ISO 9002
<b>Environmental</b>	
Temperature range: 0 – 50 °C	
<b>Dimensions</b>	
<b>A200</b>	2U form factor
	120mm x 55mm for use in restricted chassis
<b>A400</b>	2U form factor
	290mm x 55mm for use in 2U chassis
<b>B600</b>	2U form factor
	140mm x 55mm for use in restricted chassis
<b>Mounting</b>	
Includes both standard and short half-height compatible mounting clips for installation in 2U rack-mount servers	
Compatible with all commercially available motherboards	
<b>Power Supply</b>	
<b>A200</b>	PCI:3.75W(0.75A@5V)+4.2W(0.35A@12V) per FXS module
	PCIExpress:2.64W(0.8A@3.3V)+4.2W(0.35A @ 12V) per FXS module
<b>A400</b>	800 mA peak, operational 300 mA max at +3.3 V or 5 V
<b>B600</b>	3.6W(0.3A@12V)and1.65W(0.5A@3.3V)