

## Sangoma and pbxnsip

Sangoma's telephony and data building blocks offer outstanding price and performance to leading communication application vendors worldwide.



Sangoma's hardware, software and gateway building blocks enable communication applications — running on standard computing servers — to connect to a wide variety of voice and data networks. Communication application developers and resellers, across the globe, rely on Sangoma's unique ability to provide superior quality connectivity to external networks using an intelligent, cost-effective architecture.

## Sangoma Digital Voice and Data Networking Cards

Sangoma Digital Telephony Cards transport voice, as well as data, and make voice and data integration easy.

Sangoma's unmatched voice optimized hardware is fueling the Open Source PBX market. Sangoma's quality, reliability and support is well known in the open source community. Sangoma raised the bar in TDM voice communications with on-board, Telco-grade, hardware echo canceller DSPs available on all Sangoma voice cards and the most optimized, scalable, cross-platform device drivers available.

## Sangoma Analog Telephony

Sangoma's optimized voice hardware quality coupled with its innovative software building blocks is unmatched and is fueling the IP PBX market. Since 1984, Sangoma's innovative product designs have provided the quality professionals trust.

Choose the PSTN connectivity hardware with the most optimized, scalable, cross-platform device drivers available.

## NetBorder Express Gateway Cards

Sangoma's NetBorder Express portfolio is a complete SIP-compliant VoIP Media Gateway solution, delivering cost effective solutions for developers, system integrators, and OEMs in a convenient PCI or PCIExpress form-factor.

Empowered by Sangoma's NetBorder Express Software, NetBorder Express TDM to SIP Gateway Cards include G.168 Telco-Grade Echo Cancellation with 128 ms echo tails without call capacity reduction to provide optimum operating conditions for applications, such as Speech Recognition IVRs and International Toll Bypass. NetBorder Express cards also feature Sangoma's award-winning field upgradeable crashproof firmware design.

## Sangoma Digital Voice and Data Networking Cards



### **A101: Single Port Digital Telephony Card**

The industry's first affordable single port T1/E1/J1 card with available Telco-grade hardware echo cancellation. It's designed for optimum voice support for smaller systems. The Sangoma A101 Card supports up to 30 simultaneous voice calls or 4.1 Mbps of full-duplex data throughput through a single T1, E1 or J1 line.



### **A102: Dual Port Digital Telephony Card**

The Sangoma A102 Card supports up to 60 simultaneous voice calls over two T1, E1 or J1 lines or up to 8.2 Mbps of full duplex data throughput.



### **A104: Four Port Digital Telephony Card**

Choose the Sangoma Quad Port A104 Card to support up to 120 simultaneous voice calls over four T1, E1 or J1 lines or up to 16.4 Mbps of full duplex data throughput.

## **A200: 2 Port – 24 Port Expandable Analog Voice Card**



## **A200: 2 - 24 Port Expandable Analog Voice Card**

Superior audio quality in a voice card that is expandable from two to twenty-four ports in a half-height form factor the Sangoma A200 FXO/FXS card delivers! A single PCI or PCI Express slot hosts the connection and ensures common synchronous clocking for all channels. Use this card in your PC to accommodate up to twenty-four simultaneous external calls.

The A200 Series of Analog Voice Cards deliver superior audio quality in a compact 2U card that expands from two to twenty-four ports using a single interface slot.

For optimum echo-cancelled voice quality and enhancement choose the A200D Model with Octasic<sup>®</sup> DSP Daughterboard Hardware Echo Canceller. One DSP echo canceller on the A200D Base Card will support Telco-grade hardware echo cancellation on all channels up to the card's maximum configuration in 24 ports with no additional CPU load. To reach this configuration, simply add additional Remora<sup>™</sup> cards to any base card in the A200 Series. A single PCI or PCI Express slot hosts the connection and ensures common synchronous clocking for all channels. Like all the cards in the award-winning Sangoma AFT Series Product Line, the A200 and Remora<sup>™</sup> system's architecture is shared with Sangoma's A101, A102, A104, and A108 cards, ensuring common 3.3 V or 5 V, high performance, universal PCI or PCI Express compatibility, and crash-proof field upgradable firmware to take advantage of enhancements, as soon they become available.

Sangoma cards guarantee error-free faxing and click-free audio on analog-digital links.



## **NetBorder Express Gateway Cards**



## Introducing the industry's first affordable TDM to SIP Gateway on a card

Sangoma's NetBorder Express portfolio is a complete SIP-compliant VoIP Media Gateway solution, delivering cost effective solutions for developers, system integrators, and OEMs in a convenient PCI or PCIExpress form-factor.

Tested with pbxnsip!

Empowered by Sangoma's NetBorder Express Software, NetBorder Express TDM to SIP Gateway Cards include G.168 Telco-Grade Echo Cancellation with 128 ms echo tails without call capacity reduction to provide optimum operating conditions for applications, such as Speech Recognition IVRs and International Toll Bypass. NetBorder Express cards also feature Sangoma's award-winning field upgradeable crashproof firmware design.

NetBorder Express communicates with applications pbxnsip directly with the ubiquitous SIP control protocol to reduce deployment time, complexity and cost for next generation network application deployments.

Available in one to eight ports of T1/E1, NetBorder Express Gateway Cards are an excellent value for installations ranging anywhere from 24 to 240 simultaneous calls.

