NetBorder™
EXPRESS 4.3

FEATURES

☑ **Flexible Software Implementation**

☑ **Integrates with Other SIP-based Applications (i.e. 3CX®, Snom® ONE and Microsoft® Lync)**

☑ **RFC 3261 SIP Compliant Solution**

☑ **Extensive Range of PSTN Protocols:**

  • **Analog FXO and FXS** via A200 and B600 cards

  • **ISDN BRI** via A500 and B700 cards

  • **MFC R2** via A10x cards

  • **ISDN PRI** via A10x cards

☑ **G.168 Telco-grade Hardware Echo Cancellation**
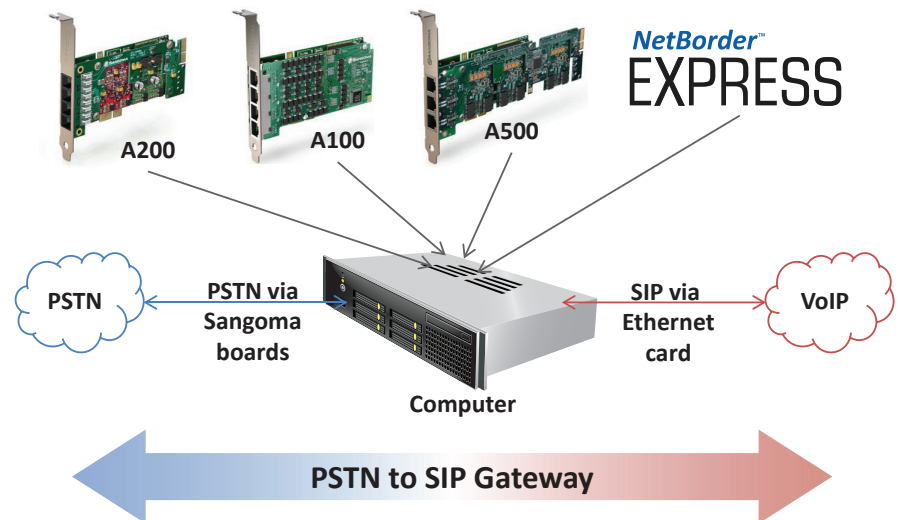
☑ **Web-based GUI Management and Configuration**

APPLICATIONS

☑ **IP PBX**

☑ **Call Center**

☑ **IVR**

☑ **Conferencing Server**

PSTN to SIP Gateway Software

The most flexible gateway implementation, eliminating the need for external gateways.

NetBorder Express software, together with Sangoma's computer telephony boards, is a complete SIP-compliant VoIP Media Gateway solution, delivering the most flexible and cost effective solution by removing the need for external gateways.

Compatible with Analog FXO and FXS, MFC/R2, ISDN BRI and PRI telephony interfaces, NetBorder Express can scale from 2 to 480 simultaneous calls, providing excellent value and flexibility for deployments in any geography.

NetBorder Express communicates with applications such as IP-PBXs, speech enabled IVRs, conferencing servers, contact center or trunking gateways directly with the ubiquitous SIP control protocol to reduce deployment time, complexity and cost for next generation network application deployments.

NetBorder Express software is licensed via a simple online process. You can download the free SOHO version directly from Sangoma's web site. The SOHO version is full featured for up to 12 ports. If you need more than 12 ports, a commercial license is required. Sangoma Telephony hardware must be purchased separately.

TECHNICAL SPECIFICATIONS

PSTN Protocol Termination

- Analog FXO/FXS (with A200 or B600 hardware)
- ISDN PRI (with A100 hardware)
  - » North American variants
  - » EuroISDN
  - » **NEW** Japan variant (INS1500)
- **NEW** ISDN BRI (with A500 or B500 or B700 hardware)
  - » **NEW** point-to-point variant
  - » **NEW** point-to-multipoint variant
- **NEW** MFC/R2 (with A100 hardware)
- Capacity from 2 to 480 channels of simultaneous calls per system

VoIP Protocol Termination

- TCP or UDP
- SIP Control Protocol per RFC 3261
- RTP/RTCP per RFC 3550/3551

Security

- TLS per RFC 5246
- SRTP per RFC 3711
- **NEW** HTTP Digest authentication

Media Processing

- G.168-2002 Echo Cancellation with hardware option
- DTMF over RTP per RFC 2833. International and custom tone detection and generation
- Voice Activity Detection and Comfort Noise Generation (VAD/CNG)
- **NEW** T.38 Fax relay

Software License

- **NEW** Default SOHO license available for download for up to 12 ports
- Commercial software licenses required above 12 ports
  - » 25-digit license ID provided upon purchase
  - » License ID and Server MAC address required for Web registration and download of software
  - » License file host locked

Application Compatibility

- Microsoft Lync
- 3CX
- SnomOne
- Voxeo
- Genesys SIP Server
- Any other standard SIP application
- NetBorder Express can be installed on the same server or on a dedicated server

Operating System Support

- Microsoft Windows XP 32 bits
- Microsoft Windows 2003 Server 32 bits
- Microsoft Windows 7 32 & 64 bits
- Microsoft Windows 2008 Server 32 & 64 bits
- **NEW** Linux CentOS 5.5 32 bits

Compatible Sangoma Hardware

- Analog FXO and FXS
  - » A200
  - » **NEW** B600
- ISDN BRI
  - » **NEW** A500
  - » **NEW** B700
- **NEW** MFC/R2
  - » A101, A102, A104, A108
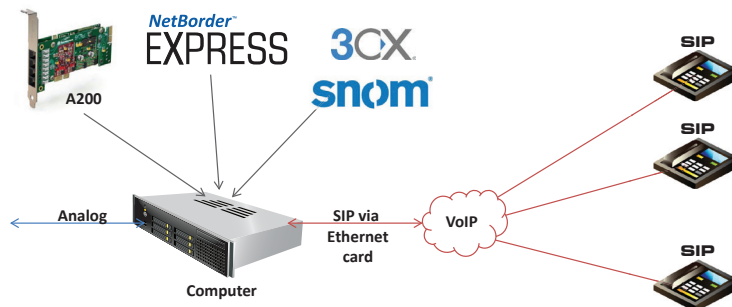- ISDN PRI
  - » A101, A102, A104, A108

Notes:

- *Hardware must be purchased separately*
- *Hardware echo cancellation option is mandatory for NetBorder Express*
- *NetBorder Express software installs compatible board drivers automatically. There is no need to obtain board drivers separately*
- *Each specific NetBorder Express software version is tested against a specific version of the firmware that comes loaded on Sangoma hardware. It may be required to upgrade the firmware of the boards at installation time. At installation time, NetBorder notifies the administrator and provides instructions to perform this step*
- *Consult NetBorder Express Release Notes for more details*

Management and Configuration

- Web Server
- Web Services API
- Configuration files for easy integration into OEM applications
- SNMP DS0, DS1 and Call Stats MIBS
- Contextual Help Menus
- Extensive Logging
- Automatic Board Discovery
- Open Protocol Translation and XML based routing rules
- Configurable ISDN PRI to SIP Mapping per RFC 3398
- **NEW** Smart Update
- **NEW** Automatic IP-PBX Provisionning

Minimum Server Specs

- Intel or AMD processors
- Dual Core processor or later
- 1 GB of RAM or better

Example of Integration of IP-PBX software with NetBorder Express