Overview

The SmartNode 4900 Series IpChannel Bank is the perfect business solution for applications requiring 12 to 32 concurrent analog voice/fax calls. The IpChannel Bank transforms any PBX system, analog call-center application, or ISP MDU service into a state-of-the-art packet-voice system without requiring costly equipment replacement or upgrades.

There are several models in the SN4900 Series - ranging from 12 to 32 FXS or FXO ports (look for the "JO" letters in the model code for FXO ports, and the "JS" letters for FXS ports). Also available are different WAN interface options: V.35, X.21, T1, E1, ADSL, G.SHDSL.

The SN4900 Series supports key industry-standard VoIP signaling protocols such as SIP, H.323, and T.38 Fax Relay--plus fax-bypass and modem-bypass. This ensures interoperability with the leading soft switches and VoIP services.

Built-in Quality of Service (QoS) features include voice prioritization and traffic management via configurable service-policy profiles. Patton's advanced DownStreamQoS ensures clear, uninterrupted voice—even over best-effort networks such as the Internet. Packet classification using 802.1p, TOS, and DiffServ makes integration with existing managed QoS networks easy.

Create custom security profiles for a comprehensive security environment. IPSec in the SN4900 Series delivers data integrity, authentication, anti-replay and data confidentiality. Firewall capabilities include Access Control Lists (ACLs), IP-address and port filtering, protection against Denial of Service (DoS) attacks, and use of second Ethernet port as DMZ.

Offering easy setup, reliable operation, and third-party interoperability on a proven platform, the SN4900 Series IpChannel Bank sits at the core of cost-effective business solutions. The investment protection you need for the future is here today.

Applications

Protect your investment—integrate analog equipment

Legacy is not bad! While VoIP offers distinct advantages in almost every aspect of communications, in many cases it is appropriate to integrate legacy equipment into a VoIP system rather than replacing it. The SN4900 Series is the enabler that protects your investment in analog equipment. It enables enterprises to extend multiple analog lines from a PBX to a remote location wich existing cabling or phones, taking advantage of a single IP link to transport up to 32 voice calls. The remote location can be a building around the block as well as a partner in another continent.





For call centers, the SN4900 is the ideal, reliable solution to integrate legacy work desks and cabling into next-generation, VoIP based call center software.

Features

- 12, 16, 24 or 32 FXS or FXO ports—Simultaneous voice or fax calls on all ports.
 Advanced local call switching.
- Full SIP and T.38 support—Supports the complete range of industry standard VoIP: SIP, H.323, T.38 fax, fax and modem bypass, DTMF relay. Codecs G.729, G.723 etc.
- Secure ToII-Quality VoIP—DownStreamQoS and Voice-over-VPN with adaptive traffic management and shaping for maximum voice quality and secure voice communication
- Complete Access Routing

 —Two 10/100 Ethernet ports with auto MDI-X. Access router with NAT, Firewall, PPPoE, DHCP, DynDNS, multiple VLANs & VPN with IPSec*
- Optional Integrated WAN uplink—Choose from V.35, X.21, T1/E1, ADSL or G.SHDSL data interfaces in addition to the two Ethernet ports.

Specifications

12, 16, 24, 32 simultaneous VoIP calls Capacity • SIPv2 H.323v4 (simultaneously with B2BUA capability) SIP call transfer, redirect DTMF in-band & out-of-band Voice Signaling All tones programmable (dial, ringing, busy) CODEC G.711 a-law/mu-law, G.723, G.729ab
 G.726, G.727. T.38 fax relay (9.6 k, 14.4 k) Voice Processing G.711 transparent fax and bypass Regular expression based call routing and number manipulation Number blocking **Call Switching and Services** Digit collection, distribution and hunt groups Transparent line extension 2-wire Loopstart on 50pin (12 to 24 channels) or 64-pin (32 channels) Telco connector Short haul loop 1.1km @3REN EuroPOTS (ETSI EG201188) **FXS Connectivity** Programmable AC impedance, feeding, ring and on-hook voltage Caller-ID FSK and ITU V.23/Bell 202 generation 2-wire Loopstart on 50pin (12 to 24 channels) or 64-pin (32 channels) Telco connector Programmable impedance, ring detection, tone detection, disconnect supervision **FXO Connectivity** • Two 10/100 Ethernet ports Complete IP access router DHCP Client & server **Data Services** Packet fragmentation
Static firewall, NAT, NAPT RFC 1631 access control lists DMZ port • Voice priority DownStreamQoS™ Traffic management, shaping and policing **Quality of Service** IEEE 802.1Q, VLAN tag insertion/deletion 4,096 X.21/V.35 Frame Relay (8 PVCs); RFC1490, FRF.12 fragmentation; LMI, Q.933D, ANSI 617D, Gang of Four; PPP, PAP, CHAP, LCP, IPCP) AZE/W.SST Haller Relay (61 YOS), TO 1430, TKL 12 Hagine Industri, E T1/E1 (ITU-T G.703, ANSI T1.403; & AMI, B8ZS, HDB3) ADSL2+ (Annex A, B, I, J, I, M, U-R2) G.SHDSL (G.991.2, Annex A, B, F, G, Up to 5.7Mbps, 8 PVCs, QoS) **Optional WAN interfaces** Web/HTTP, CLI with local console and remote Telnet access TFTP configuration & firmware loading SNMP MIB II and product MIB Management Secure auto-provisioning for both firmware and unit/subscriber configuration Built-in diagnostic tools (trace, debug, call generator) CPU Motorola MPC875 @ 133 MHz System Memory 32MB SDRAM/8MB Flash 100-240 VAC (50/60 Hz) Power Power dissipation: > 22W (60W max, model SN4932/JS/RUI) Operating temperature: 32 - 122°F (0 - 50°C) Operating humidity: Up to 90% (non condensing) **Operating Environment** EMC compliance: EN55022 and EN55024
Safety compliance: EN 50950 CE compliance Compliance FCC Part 15 Class A RoHS