8/16/24 port Modular High Density VoIP Gateway

By Modular hardware design SB800/S1600/S2400 series makes any combination of the telephone interface. The Soundwin SB800/S1600/S2400 Series VoIP Gateway is fully SIP and /H.323 standard compliant high density gateway that provides a total solution for integrating voice-data network and PSTN. By modular installation, this revolutionary compact voice over IP (VoIP) gateway could be easily configured as 8/16/24 channels high density FXS/FXO VoIP Gateway which provides voice connectivity over the IP network and to the Public Switched Telephone Network (PSTN).

VoIP Key Features

- Modular design to accommodate various types of telephony interfaces.
- Both support SIP and H.323 protocols: SIP Registration and Digest Authentication; H.323 Gatekeeper Registration.
- SIP Single Number / Account for multiple ports.
- Caller ID Delivery: FXS support DTMF Caller ID generation.
- Smart VoIP call Dialing Book: VoIP call Book could provide any application VoIP call to any type destination (Domain name / IP address, PSTN or PBX) or hunting number setting.
- AC termination Impedance : 600/900 OHM and complex impedance
- Answer Supervision for Polarity Reversal Detection and Voice detection
- NAT traversal: This feature allow gateway to operate behind any NAT/Firewall device. Need not to change any configuration of NAT/Firewall like setting virtual server.
- Smart-QoS Guaranteed: This bandwidth management feature provide good voice quality when user place a VoIP call and access internet at the same time. The gateway will automatically start to reserve bandwidth for voice traffic when VoIP call proceeds.
- Call Hunting Facility: This function helps gateway to use the lines effectively. This facility automatically transfers your incoming call to a free line. Subscribers need not indicate numerous numbers of each port of gateway.
- Voice channels status display: This function display each port status like as onhook, offhook, calling number callee's number, talk duration, codec.
- Flash Detection and Generation Program: FXO support Flash Generation and FXS support Flash Detection.
- **FXO answer Mode:** FXO provides Ringing Answer, Connection Answer and Non Answer for configuration.
- FXO anti-seized mechanism : FXO provides busy tone auto-learning and manually configuration busy tone learning..

Telephony Specification:

- Voice Codec: G.711(A-law /μ-law), G.729 AB, G.723 (6.3 Kbps / 5.3Kbps)
- FAX support : T.30 / T.38
- Echo Cancellation: G.165/G168
- FXS Tone Table Configuration: Support tone frequency and cadence configuration
- FXO hang up detection / anti-seized : Busy Tone Learning Automatically / Manual Busy Tone Learning.
- Answer supervision: Support Battery Reverse Detection and Voice Detection.
- FXO answer delay time: Support delay 0 – 8000 ms to answer.
- Adjustable AC Termination Impedance : 600 / 900 OHM and complex Impedance
- **Failsafe Mechanism (FXS relay to FXO):**
  Power failed bypass support
  Internet failed bypass (Optional)
  Registered failed bypass (Optional)
  Unconditional bypass (Optional)
- 12K Hz and 16K Hz Pulse Metering   **(Customized)**
- FXS Battery Revere Generation
- Support MWI (Message Waiting Indicator) by SIP Notify (Optional).

IP Specfications:

- H.323 v2/v3/v4 and SIP (RFC 3261) , SDP (RFC 2327), Symmetric RTP, STUN (RFC3489), ENUM (RFC 2916),RTP Payload for DTMF Digits (RFC2833), Outbound Proxy Support.
- LAN :Support Virtual Server, DHCP Server
- WAN: Support PPPoE client, DHCP client, Fix IP Address, DDNS client
- Network Address Translation: Providing build-in NAT router function.
- Smart QoS: Guarantee the voice bandwidth
- IP TOS (IP Precedence) / DiffServ

Call Features
- Voice channels status display
- Direct Dialing Mode : peer to peer call (support IP Address Call or Domain Name Call)
- Register Call Mode : register to SIP Proxy Server or H.323 Gatekeeper
- Adjustable volume : - 9 db ~ 9 db
- Silence Compression / VAD
- Auto Dial for speed
- Dynamic Jitter Buffer
- Hot-Line and Warm-Line Support

Configuration & Management
- Web-based Graphical User Interface
- RS232 for configuration
- Remote management over the IP Network
- FTP firmware upgrade
- Backup and Restore Configuration file
- Front LCD Panel for System Status and Management
- Syslog client support
- Auto-Configuration

General Specification
- Standard 50 pin RJ-21 Telco connectors
- AC power : AC100V-240V, DC12V/1.5A,50/60 Hz
- Temperature: 0°C ~ 40°C (Operation)
- Humidity: up to 90% non-condensing
- Emission: FCC Part 15 Class B, CE Mark
- RoHS Compliant
- Dimension : 440 x 250 x 45 mm
- Weight: 5300 g

SB800/S1600/S2400 Series VoIP Gateway Catalogue

	SB800	SB808	SB804	S1600	S1608	S1616	S2400	S2412	S2424
Ethernet Interface	1 WAN + 1 LAN								
RS232 Console	1 RS232 console for configuration								
LCD Panel	Front LCD Panel for System Status and Management								
Telephony Interface	Standard 50-pin Telco connector								
FXS/FXO	8 FXS	8 FXO	4FXS+4FXO	16 FXS	8FXS+8FXO	16 FXO	24 FXS	12 FXS + 12 FXO	24 FXO
Modules Combination	SB800	SB808	SB804	1SB800+ 1SM800	1 SB804+ 1 SM804	1SB808 + 1 SM808	1SB800+2 SM800	1 SB804+ 2SM804	1 SB808 +2SM808
H.323 v2/v3/v4	✔	✔	✔	✔	✔	✔	✔	✔	✔
SIP(RFC3261)	✔	✔	✔	✔	✔	✔	✔	✔	✔
Smart-Qos	✔	✔	✔	✔	✔	✔	✔	✔	✔
NAT Traversal	✔	✔	✔	✔	✔	✔	✔	✔	✔
Echo Cancellation	✔	✔	✔	✔	✔	✔	✔	✔	✔
G.711 a / μ law G.723, G729AB	✔	✔	✔	✔	✔	✔	✔	✔	✔
T.38/T.30	✔	✔	✔	✔	✔	✔	✔	✔	✔

SB800/1600/S2400 Series VoIP Modules Card Catalogue

Motherboard	Description and Function
SB800	Motherboard with 8 FXS Interface + 1U/19 inch Chassis
SB804	Motherboard with 4 FXS + 4 FXO Interface+ 1U/19 inch Chassis
SB808	Motherboard with 8 FXO Interface + 1U/19 inch Chassis

Modular Card	Description and Function
SM800	8 FXS Interface Module
SM804	4 FXS + 4 FXO Interface Module
SM808	8 FXO Interface Module

Caller ID Detection Support Model

Model	SB808D	S1616D	S2424D
FXO	8 FXO	16 FXO	24 FXO
Caller ID Detection Module	✔	✔	✔

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