

VZ.Voice™

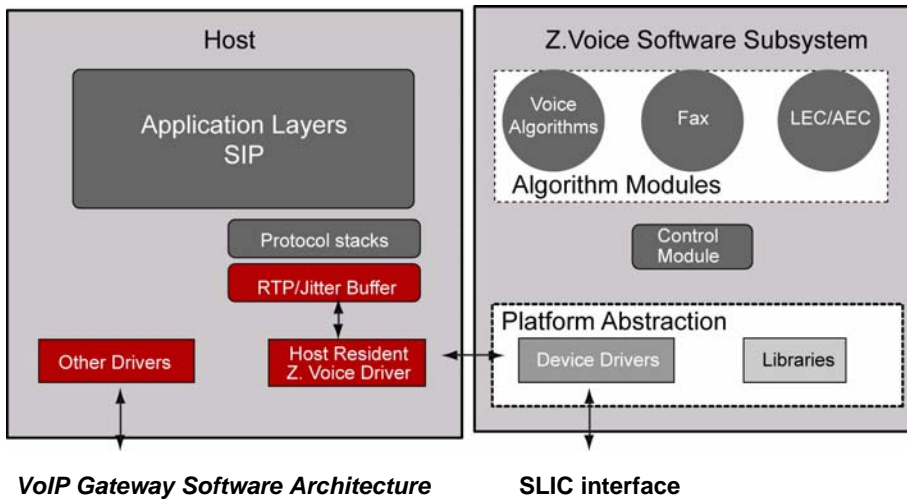
VoIP Gateway Reference Design



Voice-Over-IP is the value application for the emerging broadband infrastructure industry fueled by DSL, cable and Wi-Fi deployment. VoIP value proposition of lowered long distance voice communication, integration with Web Applications for customer service and low cost enablement of voice channels in emerging countries is leading to explosive growth in VoIP subscribers. This type of phenomenal growth requires Take-To-Market reference designs that are cost-effective and time-efficient for ODM's to quickly deploy in the marketplace.

VZ.Voice Gateway Reference Design

VZ.Voice Gateway is a complete Voice-Over-IP Gateway reference design developed by in partnership between VeriSilicon, with Micrel and Encore Software. Micrel's KS8695P/PX with its integrated 5-port Ethernet switch SoC runs the Session Initiated Protocol (SIP) signaling and router software from Encore. A VSI403LC or VSI403LP ZSP® voice processor runs the VZ.Voice codec and telephony software solution from VeriSilicon, to support 2 or 4 ports of voice, with an optional FXO port.



APPLICATIONS

- Wired/Wireless Router with 2 or 4 ports of voice, with an optional FXO port.

FEATURES

- 2 to 4 RJ-11 Voice Ports
- Integrated Managed 5-port Ethernet Switch
- VSI403LC /LP ZSP Voice Processor
- Complete software solution
- Customization support

VALUE PROPOSITION

- 2-4 Voice ports plus FXO with 5-Port Ethernet switch and PCI for wireless
- Lower BOM cost than other solutions
- Take-to-market reference design is cost-effective and time-efficient
- Silicon integration roadmap and software customization
- Easy to buy as design kit for ODM's/OEM's

SW Package Name	Configuration	External RAM	G.711	G.723.1	G.726	G.729AB	T.38	Supported
ZV19-4L4S	4FXS	64K x 16	X			X		VSI403xx
ZV169-5L4S10	4FXS+1FXO	128K x 16	X		X	X		VSI403LP
ZV1369-3L2S10	2FXS + 1FXO	128K x 16	X	X	X	X		VSI403LP
ZV169T 1-5L4S10	4FXS + 1FXO	128K x 16	X		X	X	X	VSI403LP
ZV169TA-3L2S10	2FXS + 1FXO	128K x 16	X		X	X		VSI403LP
ZV1369TA-3L2S10	2FXS + 1FXO	128K x 16	X	X	X	X	X	VSI403LP

VZ.Voice SW Product Packages



VZ.Voice™ VoIP Gateway Reference Design

VZ.VOICE PACKAGE

- G.711, G.729AB, G.723.1, G.726, G.722, G.722.1, G.722.2 Codecs
- G.168 Line Echo Canceller
- DTMF Detection / Generation
- Call Progress Tone Generation
- Call Progress Tone Detection
- Caller ID Generation
- Caller ID Detection
- Voice Activity Detection (VAD)
- RTP/Adaptive Jitter Buffer
- AEC/NR
- Comfort Noise Generation (CNG)
- Packet Loss Concealment (PLC)
- T.38 Fax Relay
- T30 / Group 3 Fax Support

HOST SIDE SOFTWARE

- Example Linux ZSP driver is provided with Z.Voice software license
- RTP/JB Source available for Licensing
- SIP Available for Licensing from Encore Software and other partners

BOARD OPTIONS

- Micrel – VSI reference Router Design
- Fully integrated software for Micrel and VSI devices
- Single board, dual Legerity SLICS option
- Two board, 4FXS+FXO Silicon Labs option
- ZSP daughter board
- 4FXS+FXO
- HPI Interface to work standalone or with any host



About VeriSilicon

VeriSilicon Holdings Co., Ltd ("VeriSilicon") is a fast growing silicon solutions company providing products and services that enable customers to meet their chip design objectives, accelerate development programs and deliver market proven silicon products - on time and at lower cost. VeriSilicon specializes in providing expert design services, market leading ZSP® licensable cores and platforms, industry standard semiconductor IP and scalable ASIC turnkey services across a broad range of application markets, including multimedia, voice and wireless communications. VeriSilicon has design, operation and sales and support offices in Santa Clara, California, Dallas, Texas, Shanghai and Beijing, China, Taipei, Taiwan, Tokyo, Japan, Nice, France and Seoul, Korea. For more information, visit www.verisilicon.com.

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