

PRODUCT PREVIEW

Zarlink's VoiceEdge™ VE950 Series offers high performance, voice over broadband SLIC devices with universal differential ringing and codec interfaces optimized for short loop, power-sensitive applications. Providing the complete functionality required for interfacing to a subscriber loop, the VE950 products maintain ultra low power dissipation.

Differential ringing and receive inputs make the VE950 Series ideal for direct interface to data over cable service interface specification (DOCSIS) compliant cable modem gateways, multimedia adaptors, ONT/PON CPE and residential gateway products. This Series is optimized to interface to Broadcom cable modem and PON SoCs



High Performance Voice over Broadband SLIC Devices

- ➔ Single and dual channel devices
- ➔ Fully compliant to all worldwide specifications
- ➔ Ultra-Low power
 - Lowest power consumption of any SLIC solution available
 - Exceeds compliance with European Code of Conduct and other 'green' initiatives
- ➔ High voltage design
 - Support up to -145V ringing option
 - Meets all worldwide ringing requirements without clipping distortion
 - Allows use of 50 or 80 ohm protection resistors and lower cost protection alternatives
- ➔ Most robust protection and lowest cost protection options
 - Compliant to all protection standards
- ➔ Excellent thermal design results in improved reliability and simplified PCB layout
- ➔ Channel independent operating states
- ➔ Per channel ringing inputs for optimized interface to Broadcom SoC devices
- ➔ Test Load Switch to support integrated test algorithms
- ➔ Worldwide programmability

Applications

- ➔ Optimized design to work with SoCs which have an integrated codec
- ➔ Cable modems
- ➔ PON Gateways
- ➔ Other short loop Residential VoIP Gateways and Routers

VE950 Series			
Device	OPN	Package	Ringing Voltage
Dual Channel			
	Le9540C	40 QFN	-100 V
	Le9540D	40 QFN	-145 V
	Le9530C	48 eTQFP or 48 QFN	-100 V
	Le9530D	48 eTQFP or 48 QFN	-145 V
	Le9520C	64 eTQFP	-100 V
	Le9520D	64 eTQFP	-145 V
Single Channel			
	Le9531C	48 eTQFP or 28 QFN	-100 V
	Le9531D	48 eTQFP or 28 QFN	-145 V
	Le9520SD	64 eTQFP	-145 V
	Le9500A	28 PLCC	-75 V
	Le9500B	28 PLCC	-85 V
	Le9500C	28 PLCC	-100 V
	Le9500D	28 PLCC	-145 V

APPLICATION

Zarlink's VE950 Series consists of single-channel and dual-channel devices optimized to provide battery feed, ringing, and supervision on short loop plain old telephone service (POTS) loops. These devices are optimized to interface to SoCs with an integrated codec.

The VE950 Series significantly increases design flexibility, improves system performance and reduces system BOM cost. The single- and dual-channel SLICs are offered in footprint compatible package options as well as voltage-grade options. This enables the designer to develop one application for all worldwide markets, saving both time and money. Each channel of these SLICs can provide up to -145 V power ringing to the subscriber loop through amplification of a low-voltage input. These ultra-low power devices consume less power than any SLIC

solution available in the market. The VE950 SLICs have excellent thermal performance, providing improved reliability and simplified PCB layout compared to alternative SLIC solutions. In addition to superior performance, the VE950 SLICs require the fewest number of external components, translating to the lowest BOM cost. The high voltage design and patent pending Common Protection Reference (CPR) of the VE950 Series allows developers to use alternative protection options, thereby lowering the cost of the protection BOM. The VE950 Series of SLIC devices is fully compliant to all worldwide specifications and provides designer with a world-class and field proven solutions.

VE950 Application Diagram

