

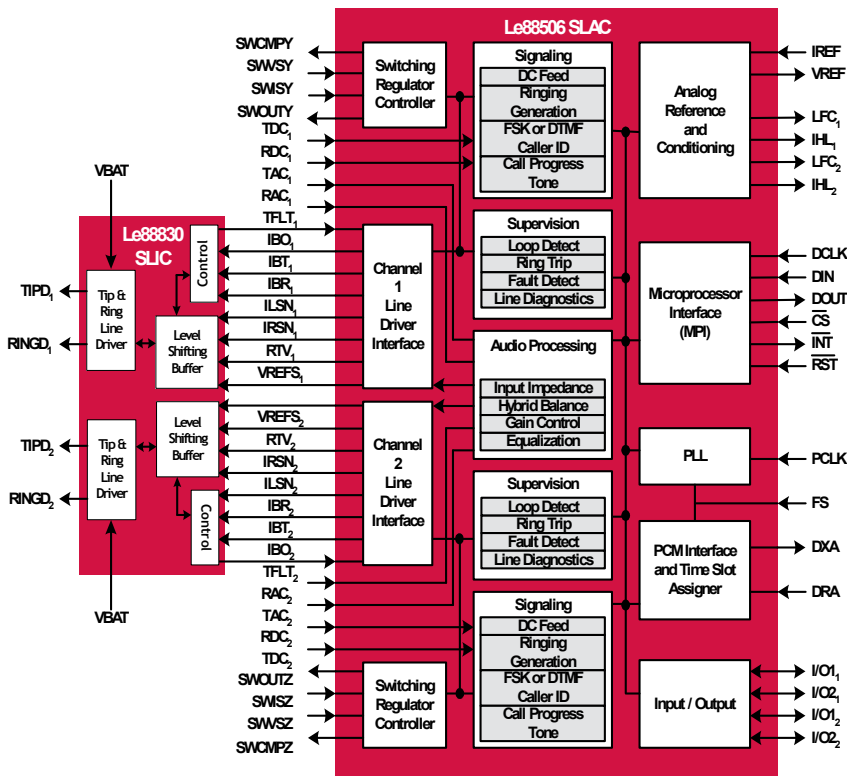
# Dual Channel Tracking Battery Wideband VoicePort Chipset—VE8820 VE880 Series

## PRODUCT PREVIEW

Zarlink's dual channel VE8820 Tracking Battery VoicePort™ chipset implements a dual-channel telephone line interface by providing all the necessary voice interface functions from the high voltage subscriber line to the  $\mu$ P/DSP digital interface. This chipset reduces system level cost, space, and power. Designers benefit by having a simple, cost effective, low-power and dense, interface design without sacrificing features or functionality. The programmable, feature rich VoicePort chipset provides a highly functional line interface which meets the requirements of short and medium loop (up to 1500 Ohms total) applications. Features include: high voltage switching regulator, self-test, line test capabilities, integrated ringing (up to 140-Vpk), worldwide software programmability with wideband capability, flexible signal generator with tone cadencing, caller ID generation and all BORSCHT functions. These VoicePort chipset features are crucial for designing cost-effective, full-featured Voice over Broadband solutions.

### Features

- ➔ Complete BORSCHT function for 2 channels in a single VoicePort™ chipset
  - Battery Feed, Over-voltage support, integrated Ringing, line Supervision, Codec, Hybrid (2W/4W), Test
- ➔ Integrated Power Management
  - Integrated high voltage switching regulator controllers
  - Low power Idle and On-hook transmission states
- ➔ Worldwide Programmability
  - Two-wire AC impedance, Balance Impedance, Gain
  - DC feed voltage and current limit
  - Ringing frequency, voltage and current limit
  - 12 kHz and 16 kHz Metering
  - Programmable loop closure and ring trip thresholds
- ➔ Ringing
  - 5 REN
  - Up to 140-Vpk internal balanced sinusoidal or trapezoidal ringing with programmable DC offset
  - Unbalanced ringing for PBX trunk compatibility
- ➔ Powerful signal generator
  - Universal Caller ID generation
  - Up to 4 simultaneous tones
  - Automatic cadencing feature
- ➔ VoicePath™ API-II Software available to implement FXS functions
  - Supports chipset calibration
  - Line configuration via VoicePath Profile Wizard
- ➔ VeriVoice™ Test Suite Subscriber Loop Test
  - Seamless integration with API-II software
  - Utilizes integrated self test capabilities
  - Line fault detection and reporting
- ➔ Pin selectable PCM/MPI or GCI interface
- ➔ G.711  $\mu$ -law, A-law, or 16 bit linear coding
- ➔ Wideband 16 kHz sampling mode
- ➔ Integrated 150 mW 3-V Relay Driver
- ➔ Small footprint chipset
  - 64-pin TQFP and exposed pad 24-pin QFN



### Applications

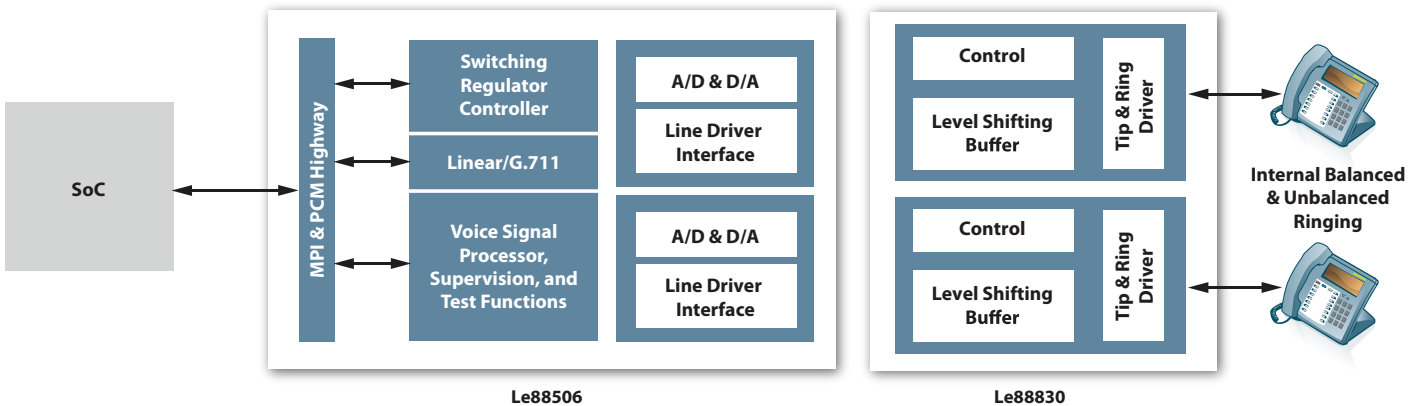
- ➔ Voice enabled Cable and DSL Modems
- ➔ Residential VoIP Gateways and Routers
- ➔ Media Terminal Adapters (MTA) Standalone & Embedded
- ➔ Fiber to the User/Premise/Home (FTTH/P/H), Fiber in the Loop (FITL) Optical Network Terminals (ONT)
- ➔ Wireless Local Loop (WLL), PBX, ISDN NT1/TA

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## APPLICATION

| FEATURES   | BENEFITS  |
|--|---|
| Lowest power solution across all operating modes   | Provides lowest power consumption solution for batterybacked and power-sensitive applications                                 |
| Highly programmable                                | Offers design flexibility to develop one application for worldwide markets  |
| Integrated ring cadencing and system state control | Reduces real-time software overhead   |
| Common application programming interface           | Significantly reduces development time with VoicePath API-II software   |
| Comprehensive line sensing                         | Enables high performance GR-909 diagnostics and subscriber loop test and self test support with VeriVoice Test Suite software |
| Integrated switching regulator                     | Enables lowest component count and highest efficiency in all states of operation  |
| Small footprint                                    | Saves board space   |

### VE8820 VoicePort Chipset



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