

## Dual Channel Tracking Battery Wideband VoicePort™ VE880 Series

### APPLICATIONS

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

### FEATURES

- Complete BORSCHT function for 2 channels in a single VoicePort™ device
  - Battery Feed, Over-voltage support, integrated Ringing, line Supervision, Codec, Hybrid (2W/4W), Test
- Integrated Power Management
  - Integrated high voltage switching regulator controllers
    - Wide input voltage range (VSW =+4.75V to +35 V)
    - Switching power supply tracks line voltage minimizing active & ringing state power dissipation
  - 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 device 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
  - External catch diode required
- Small footprint package - Exposed pad 80-pin LQFP

### ORDERING INFORMATION

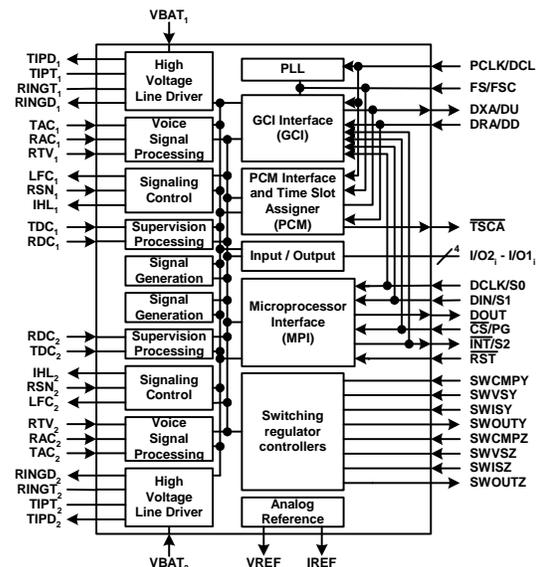
| Device OPN | Package Type                      | Packing <sup>2</sup> |
|------------|-----------------------------------|----------------------|
| Le88276DLC | 80-pin eLQFP (Green) <sup>1</sup> | Tray                 |

1. The green package meets RoHS Directive 2002/95/EC of the European Council to minimize the environmental impact of electrical equipment.
2. For delivery using a tape and reel packing system, add a "T" suffix to the OPN (Ordering Part Number) when placing an order.

### DESCRIPTION

The Zarlink dual channel Le88276 Tracking Battery VoicePort™ device 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 device 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 device 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 device features are crucial for designing cost-effective, full-featured Voice over Broadband solutions.

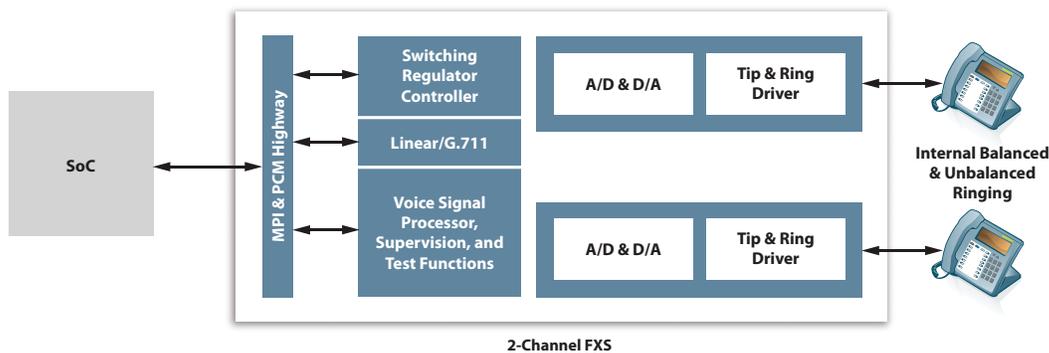
### VOICEPORT™ DEVICE BLOCK DIAGRAM



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| FEATURES   | BENEFITS  |
|--|---|
| • Highest level of integration                       | • Reduces system BOM and discrete component count   |
| • Smallest footprint                                 | • Saves board space   |
| • Lowest power solution across all operating modes   | • Provides lowest power consumption solution for battery-backed 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  |

### Le88276 VoicePort Device



### Related Literature

- [Le88116/136 Single-Channel Tracking Battery Wideband VoicePort™ Device Data Sheet\\*](#)
- [Le88266/286 Dual Channel Tracking Battery Wideband Auto Battery Switching \(ABS\) VoicePort™ Device Data Sheet\\*](#)
- [Le88276 Dual Channel Tracking Battery Wideband Auto Battery Switching \(ABS\) VoicePort™ Device Data Sheet\\*](#)
- [Le71HR0866G - VE880 Series Line Module \(Supports 2FXS up to 140 Vpk ringing with a 12 V Flyback Tracking Power Supply\)](#)

\*Contact your Zarlink Sales Representative to obtain the data sheet.

### Packaging and Availability

See *Ordering Information* on first page.

### For More Information:

To find the Zarlink Sales Office nearest you or for technical support, visit our website at: [www.zarlink.com](http://www.zarlink.com)



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