



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



## 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

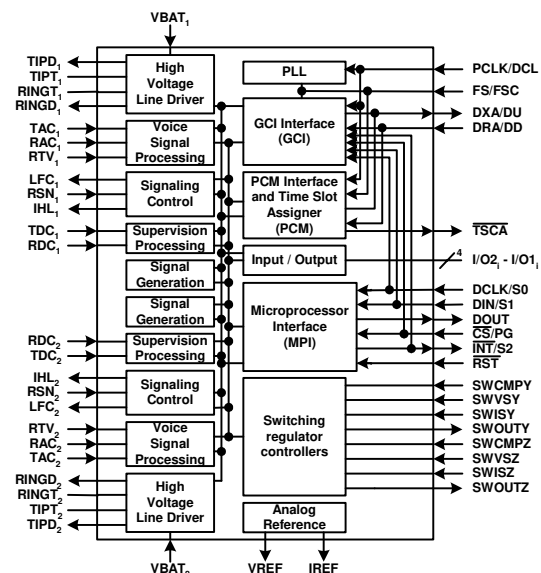
Device OPN	Package Type	Packing <sup>2</sup>
Le88276DLC	80-pin eLQFP (Green) <sup>1</sup>	Tray

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.

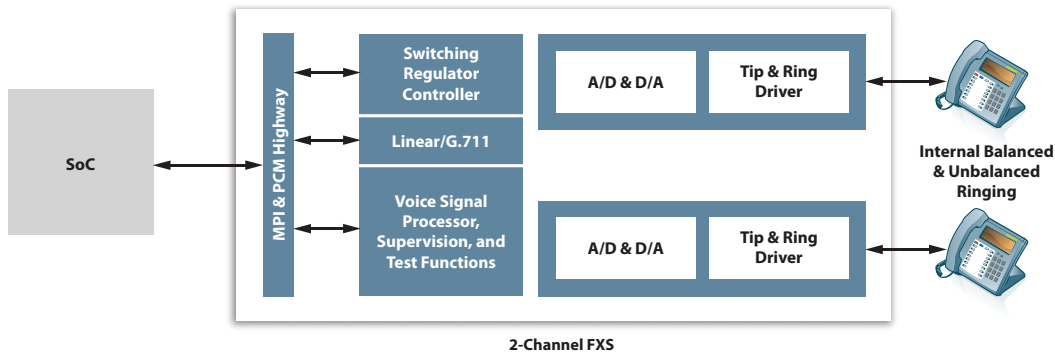
### VOICEPORT™ DEVICE BLOCK DIAGRAM





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)



**For more information about all Zarlink products  
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