



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 μ -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

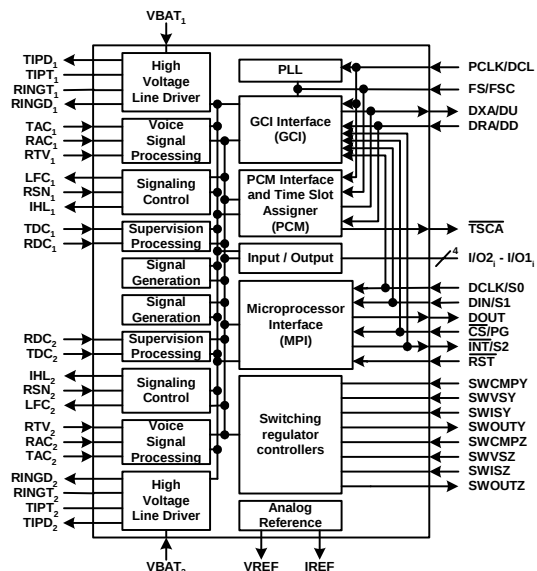
Device OPN	Package Type	Packing ²
Le88276DLC	80-pin eLQFP (Green) ¹	Tray

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

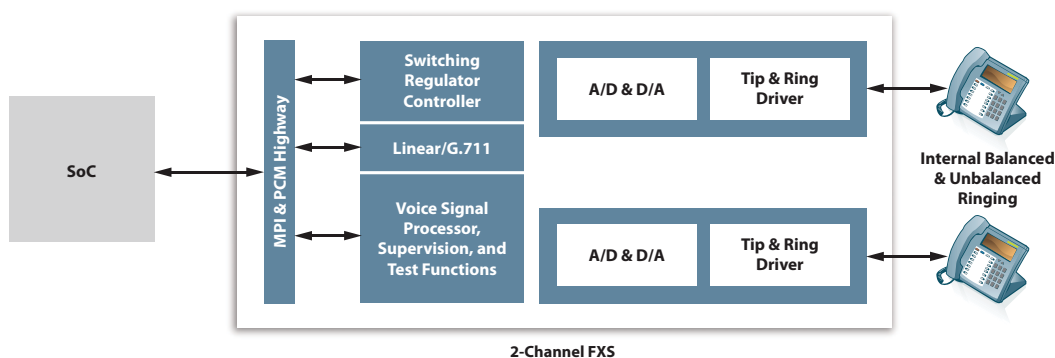
The Zarlink dual channel Le88276 Tracking Battery VoicePort™ device implements a dual-channel telephone line interface by providing all the necessary voice interface functions from the high voltage subscriber line to the μ P/DSP digital interface. This device reduces system level cost, space, and power. 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



**For more information about all Zarlink products
visit our Web Site at
www.zarlink.com**

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