

# VE880 Series

## Single Channel VoicePort™ SLAC™ Device

**Le88010**

### APPLICATIONS

- Voice Enabled DSL Modems
- Voice over IP/ATM
- Integrated Access Devices (IAD)
- Smart Residential Gateways (SRG) and Routers
- Set-Top Box with PSTN Line Interface
- PBX trunk interface
- FXO interfaces

### FEATURES

- **In combination with a DAA, provides a complete phone line termination-to-digital interface solution**
  - Fully programmable SLAC™ device
  - Disconnect, Ringing signal, Line-in-use and Line polarity detection,
  - Line supervision for parallel devices connecting to subscriber line
  - Small footprint package - 44-pin QFN
  - Minimal external discrete components required
- **Compatible with solid state or transformer DAA interfaces**
- **High speed, pin selectable PCM/MPI or GCI interface**
- **Microprocessor interface**
- **GCI interface option**
- **Programmability**
  - Two-wire AC impedance
  - Input/Output mode selection for one relay driver and five general purpose digital I/O pins.
  - Adapts to all ringing frequencies
  - Disconnect, line polarity and line-in-use thresholds
  - DTMF tone generators
  - Dial pulse and DTMF cadence
- **Special feature support**
  - DTMF tones
  - Dial pulses
  - Caller ID pass-through
  - Numeric address signaling
  - On hook transmission
- **Integrated 150 mW 3-V or 5-V Relay Driver**
  - Supports lifeline POTS in DSL IAD applications

### ORDERING INFORMATION

Device	Package
Le88010BQC	44-pin QFN (Green package)*

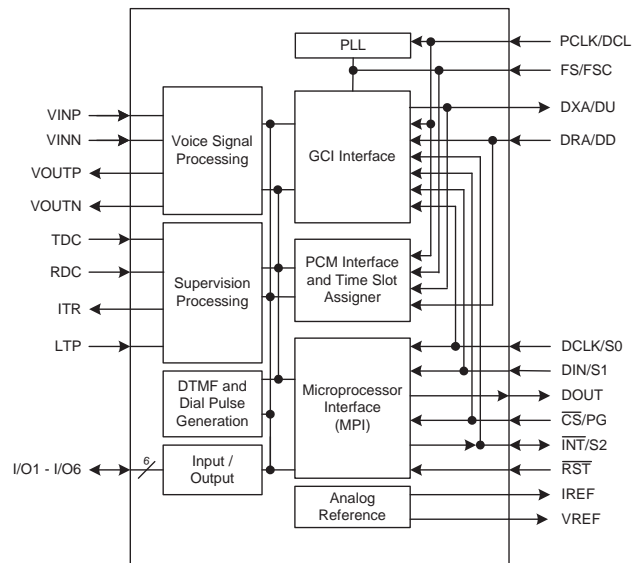
\*Green package meets RoHS Directive 2002/95/EC of the European Council to minimize the environmental impact of electrical equipment.

### DESCRIPTION

The Zarlink Le88010 VoicePort™ SLAC™ device, in combination with an analog DAA, implements all the voice functions necessary to properly terminate and monitor the customer premises side of a PSTN line and provide linear or G.711 A- or u-Law encoded voice output over a standard PCM or GCI highway. The Le88010 device is ideal for use in voice enabled DSL modems that implement lifeline POTS and support PBX functionality.

This device reduces system level cost, space, and power by achieving a high level of voice integration and adds programmability of transmission and signalling features. Designers benefit by having a simple, cost effective, low power and dense, interface design without sacrificing features or functionality.

### LE88010 VOICEPORT™ SLAC™ DEVICE BLOCK DIAGRAM



FEATURES	BENEFITS
• Seamless and compatible interface with solid state or transformer DAA	• Provides complete design flexibility to choose optimal DAA solution for target market
• Highly programmable	• Enables designer complete control over transmission and signalling features
• Highest level of integration	• Reduces system level cost and board space
• Comprehensive line monitoring	• Enables supervision functions such as disconnect, ringing signal detection, line-in-use, line polarity detection, and parallel phone off hook
• Dial pulse generation with cadence and DTMF tones	• Reduces real-time software overhead
• Small footprint, 44-pin QFN	• Reduces board space requirement with small form factor 7x7 mm square QFN package

### Related Literature and Supporting Collateral

- 081201-Le88010 VoicePort™ SLAC™ Device Data Sheet\*
- Le71HR0823 - VE880 Series Line Module supporting 1FXS and 1FXO  
Up to 150-V ringing with a 12-V Flyback Tracking Power Supply
- Le71HK002 - Universal VoicePath™ Development / Demo Platform
- Le71SK002 - VoicePath™ API-II Software System

\*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, visit our website at: [www.zarlink.com](http://www.zarlink.com).



**For more information about all Zarlink products  
visit our Web Site at  
[www.zarlink.com](http://www.zarlink.com)**

Information relating to products and services furnished herein by Zarlink Semiconductor Inc. or its subsidiaries (collectively "Zarlink") is believed to be reliable. However, Zarlink assumes no liability for errors that may appear in this publication, or for liability otherwise arising from the application or use of any such information, product or service or for any infringement of patents or other intellectual property rights owned by third parties which may result from such application or use. Neither the supply of such information or purchase of product or service conveys any license, either express or implied, under patents or other intellectual property rights owned by Zarlink or licensed from third parties by Zarlink, whatsoever. Purchasers of products are also hereby notified that the use of product in certain ways or in combination with Zarlink, or non-Zarlink furnished goods or services may infringe patents or other intellectual property rights owned by Zarlink.

This publication is issued to provide information only and (unless agreed by Zarlink in writing) may not be used, applied or reproduced for any purpose nor form part of any order or contract nor to be regarded as a representation relating to the products or services concerned. The products, their specifications, services and other information appearing in this publication are subject to change by Zarlink without notice. No warranty or guarantee express or implied is made regarding the capability, performance or suitability of any product or service. Information concerning possible methods of use is provided as a guide only and does not constitute any guarantee that such methods of use will be satisfactory in a specific piece of equipment. It is the user's responsibility to fully determine the performance and suitability of any equipment using such information and to ensure that any publication or data used is up to date and has not been superseded. Manufacturing does not necessarily include testing of all functions or parameters. These products are not suitable for use in any medical products whose failure to perform may result in significant injury or death to the user. All products and materials are sold and services provided subject to Zarlink's conditions of sale which are available on request.

Purchase of Zarlink's I2C components conveys a license under the Philips I2C Patent rights to use these components in an I2C System, provided that the system conforms to the I2C Standard Specification as defined by Philips.

Zarlink, ZL, the Zarlink Semiconductor logo and the Legerity logo and combinations thereof, VoiceEdge, VoicePort, SLAC, ISLIC, ISLAC and VoicePath are trademarks of Zarlink Semiconductor Inc.

**TECHNICAL DOCUMENTATION - NOT FOR RESALE**

---



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.