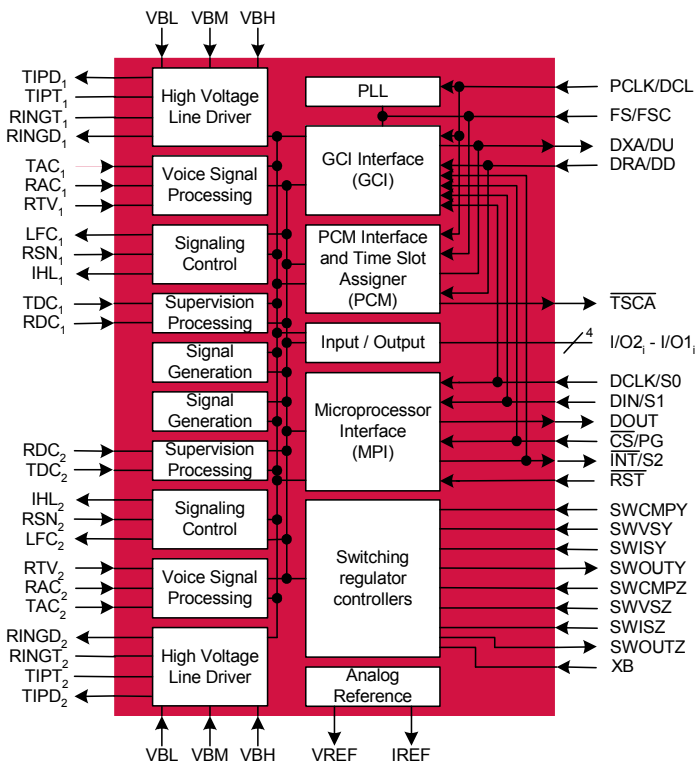


PRODUCT PREVIEW

The Zarlink Le88266/286 Automatic Battery Switching (ABS) 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. The ABS device can operate from external battery supplies, or from supplies generated by the on-chip switching regulator controllers. 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 at 1 REN) applications. Features include: high voltage switching regulator, self-test, line test capabilities, integrated ringing (up to 110-Vpk), worldwide software programmability with wideband capability, flexible signal generator with tone cadencing and caller ID generation. These VoicePort device features are crucial for designing cost-effective, full-featured Voice over Broadband solutions.



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

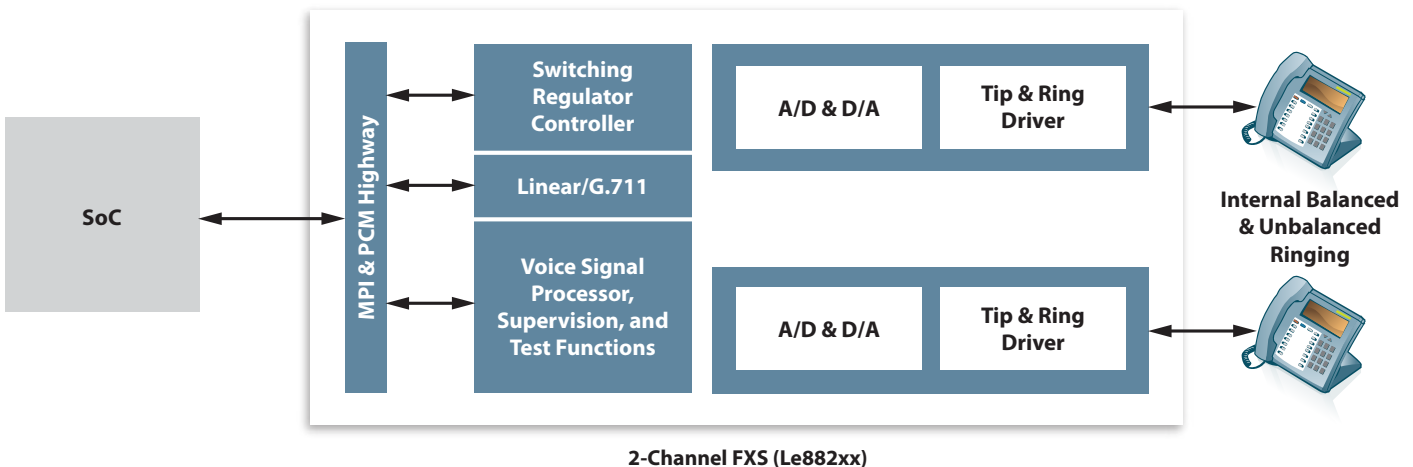
- ➔ Complete BORSCHT function for 2 channels in a single VoicePort™ device
 - Battery Feed, Over-voltage support, integrated Ringing, line Supervision, Codec, Hybrid (2W/4W), Test
- ➔ Integrated Power Management
 - Integrated high voltage switching regulator controllers
 - Low power Idle and On-hook 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 with pin for pin compatible 100-V (Le88266) and 120-V (Le88286) devices
 - Up to 110-Vpk internal balanced sinusoidal or trapezoidal ringing with programmable DC offset
- ➔ 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 64-pin QFN
- ➔ Minimal external discrete components required

APPLICATION

FEATURES	BENEFITS
Highest level of integration	Reduces system BOM and discrete component count
Smallest footprint	Saves board space
Pin-compatible options	Provides design flexibility to develop one design and populate the voice socket with the right features for a given market—100 V or 120 V, internal balanced (sinusoidal or trapezoidal)
Lowest cost of ownership	Provides the most cost-effective BOM for 2-channel applications
Highly programmable	Offers design flexibility to develop one application for world-wide 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

Le88266/286 VoicePort Devices

Pin-compatible options for 100V/120 V ABS



Information relating to products and services furnished herein by Zarlink Semiconductor Inc. or its subsidiaries is believed to be reliable. The products, their specifications, services and other information appearing in this publication are subject to change by Zarlink without notice.

ZARLINK, ZL, and the Zarlink logo are trademarks of Zarlink Semiconductor Inc.

© 2009, Zarlink Semiconductor Inc. All Rights Reserved. Publication Number 9Z5200



www.ZARLINK.com