ZARLINK SEMICONDUCTOR

VoiceEdge Solutions

Le79114

VoiceEdge™ Control Processor II
Ve790 Series

APPLICATIONS

- **Cost effective voice solution for long or short loops providing POTS and integrated test capabilities**
- **Applications include: IVD, DLC, CO, Voice-enabled DSLAM, PBX/KTS, MSAP, MSAN**

FEATURES

- **Aggregated call control lowers demand on host microprocessor**
  - **— 64 channels of call control**
- **Provides expanded line and circuit testing in conjunction with Zarlink's Ve790 Series chipsets**
  - **— Provides 32 channels of simultaneous DTMF**
  - **— Provides 4 channels of simultaneous line testing**
- **Software interface using VoicePath™ API-II**
- **Software downloadable, field upgradeable, expandable**
- **Serial and parallel host controller interface options**
- **Complete control of up to 16 Quad ISLAC devices**
  - **— Two master SPI ports**
  - **— 32 General Purpose I/Os**
    - **– 16 configured as chip selects**
    - **– 16 configured for interrupts**
- **Two slave PCM highway ports**
  - **— Single or dual PCM highways capable of operating up to 16.384 MHz**
  - **— Separate test highway option**
- **Internal PLL and hardware network timing recovery for creating analog sampling clocks**
- **3.3 V compliant I/O; Internal 3.3 V to 1.8 V linear regulator for the core logic**

ORDERING INFORMATION

Device	Package (Green)[1]	Packing[2]
Le79114KVC	128-pin TQFP	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 Le79114 VoiceEdge™ Control Processor II (VCP II) is a second generation platform that delivers enhanced call control, self-test and line test capabilities. This latest processor works with Zarlink Ve790 devices using its SPI interface(s), PCM port(s), and GPIO. The Le79114 VCP II device provides the same integrated line-testing and feature-set as the Le79112 VCP device, plus additional capabilities such as 32 channels of simultaneous DTMF detection and 64 channels of improved POTS control.

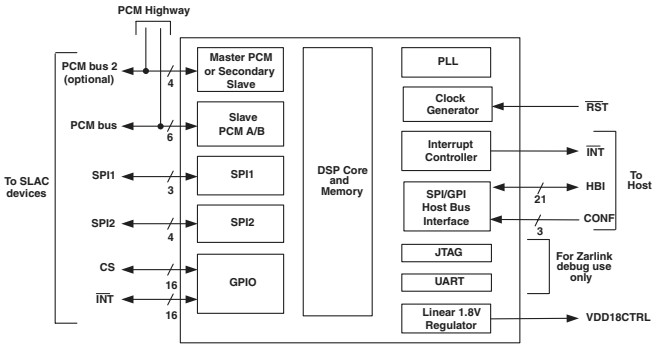
This product enables the design of a low-cost, high-performance, fully software programmable line interface for multiple country applications. All AC, DC, signaling parameters and data are fully programmable. The integrated test capability is crucial for remote applications where dedicated test hardware is not cost-effective.

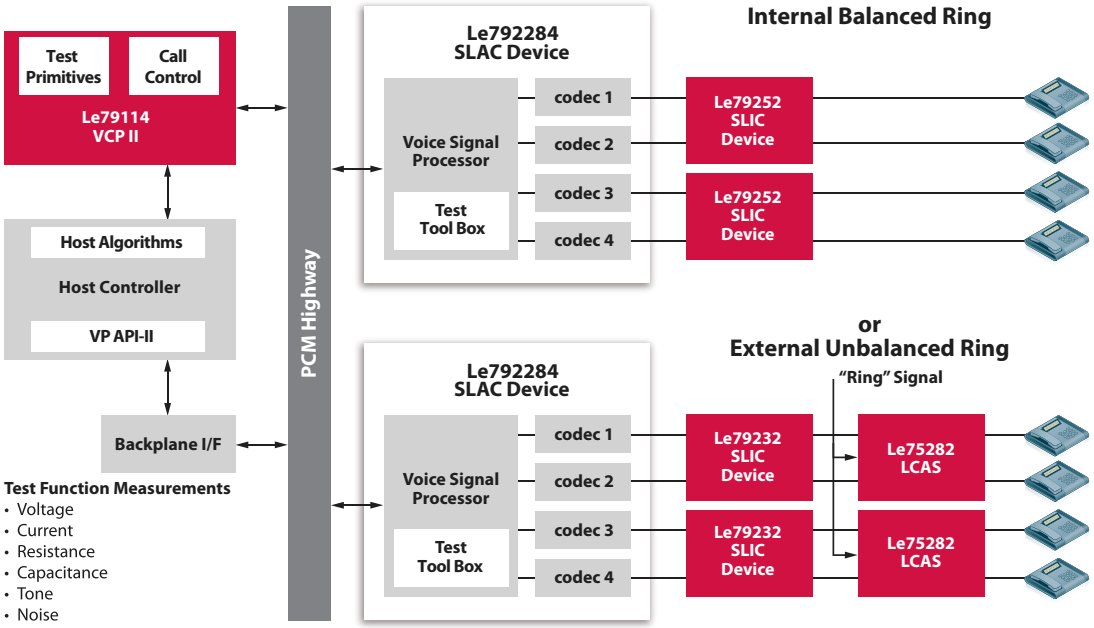
The Le79114 device is provided with extensive software and support, through the LineCare™ software suite, enabling the designer to develop a fully programmable solution in the least amount of time.

RELATED LITERATURE

- **081130 Le79232 SLIC Device Data Sheet**
- **081185 Le79252 SLIC Device Data Sheet**
- **081256 Le79228 Quad ISLAC™ Device Data Sheet**
- **081190 Le792288 Octal ISLAC™ Device Data Sheet**
- **081507 MPI and PCM Signal Integrity Application Note**
- **081572 Le79114-SW VCP Software Package Data Sheet**
- **VoicePath™ API II Reference Guide**

BLOCK DIAGRAM





Please see the LineCare™ Line-Test with Le79114 VCP II Product Preview for more information on Zarlink's line testing solutions.

**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