



# Lantiq™ XWAY™ SLIC100

## Single-Chip Dual Channel SLIC™ reduces RBOM & Power Consumption

#### **Hardware Features**

- Dual-channel line interface with integrated ringing
- Integrated balanced ringing up to 85 V<sub>RMS</sub> and integrated unbalanced ringing up to 50 V<sub>PMS</sub>
- DC/DC based generation of optimized negative supply voltage
- Minimum power dissipation in all operating modes (patented solution for ringing)
- Sensing of transversal and longitudinal line currents
- Reliable Smart Power Technology (SPT170) for high voltage part
- Standard CMOS technology (0.13 μm) for mixed signal part
- Packaged in PG-TQFP-100-9 and in VQFN 88 (no heatsink or thermalpad)
- Programmable DC-feeding
- Loop and ground start signalling
- Integrated Test and Diagnostic Functions
- Low cost Bill of Materials (BoM) and high density system solutions

The Lantiq™ XWAY™ SLIC100 implements a dual-channel telephone line interface in a single PG-TQFP-100-9 package optimized for Customer Premises Equipment (CPE) applications and Small and Medium-sized Enterprise (SME) applications.

The XWAY™ ARX188 is the fi rst Infi neon Integrated Access Device (IAD) that works in combination with the XWAY™ SLIC and is connected with a simple 3 pin interface, the Smart SLIC™ Interface (SSI). The low power standy mode makes it the industry's most power conscious SLIC™, helping to drive down the power consumption by over 60%. The high voltage part is able to provide ring signals up to 85 V<sub>RMS</sub>. In all modes of operation an optimized battery supply voltage is generated by means of an integrated DC/DC converter.

Compared to conventional solutions, a system based on the single-package. The XWAY™ SLIC100 requires up to 40% less board space. All relevant parameters are easily programmable via software thus different markets can be served with a single hardware design that meets worldwide standards.

### XWAY™ SLIC100 Family

- XWAY™ SLIC120 PEB 42068 2xFXS
- XWAY™ SLIC121 PEF 42068 2xFXS, 1xFXO
- XWAY™ SLIC110 PEB 41068 1xFXS

### **Product Summary**

- Smart SLIC™ is paired with all XWAY™ xRX family SOC's XWAY™ ARX, XWAY™ VRX and XWAY™ GRX
- Power Management
  - Ultra Low Power in Standby mode consumes up to 60% less power than conventional solutions
- · Board space saving
  - Up to 40% based on lower RBOM
  - 40 fewer components required compared to conventional solutions using SSI: 3 Pin Smart SLIC™ Interface to main processor
- Ringing confi gurable via SW
- $\bullet$  Ringing Signals up to 85  $\rm V_{RMS}$

# Lantiq™ XWAY™ SLIC100

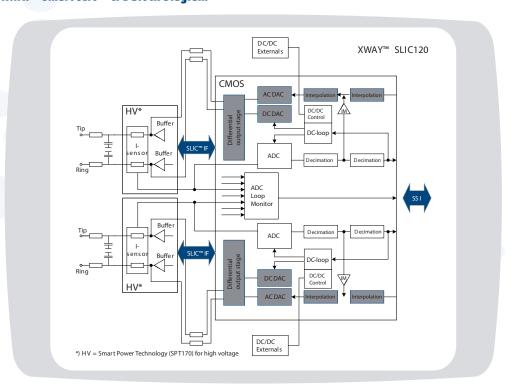
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### **Software Featues**

- Worldwide programmability for AC transmission performance parameters acc. to ITU-T Q.552 and Telcordia GR-57-CORE
- DC/DC controller includes multi-device synchronization
- · On-hook transmission
- CID type 1, 2, 3 transmission support
- Integrated DTMF generator & receiver
- Integrated balanced (up to 85 V<sub>RMS</sub>) and unbalanced (up to 50 V<sub>RMS</sub>) ringing
- DC and AC Ring Trip detection
- Fast Ring Trip detection
- · Ringing with DC offset
- Loop & ground start signalling
- · Ground key indication
- Polarity reversal (hard/soft)
- Linux® TAPI support
- Polling or interrupt driven access
- WB audio support (16 kHz, 16-bit linear)
- Integrated Test and Diagnostic Functions according to GR-909

Internal Codec for attachment to DAA FXO solution Interfaces\*

### XWAY™ Smart SLIC™-CPE Block Diagram



### **Product Summary**

Product	Sales Code	Package
XWAY™ SLIC110	PEF 41068 F V1.2	PG-TQFP-100-9
XWAY™ SLIC110	PEF 41068 V V2.1*	VQFN48
XWAY™ SLIC120	PEF 42068 F V1.2	PG-TQFP-100-9
XWAY™ SLIC120	PEF 42068 V V1.2	VQFN88
XWAY™ SLIC121	PEF 42168 V V1.2	VQFN88

<sup>\*</sup> Linux® is registered trademark of Linus Torvalds



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Order Number: PB-e-0045-v2

<sup>\*</sup> Only in XWAY™ SLIC121