



Lantique™ XWAY™ ARX188

ADSL2/2+ CPE Solution for IAD and Multi-Service Gateway Applications

Features

- Lantique Smart CPU Architecture
 - 32-bit MIPS® 34Kc Core and 32-bit Multi-threading Protocol Processor Engine (PPE)
- Smart Acceleration for guaranteed session bandwidth & QoS (e. g. IPTV)
- Unique combination of software, firmware, hardware on standard Operating System environment
- Programmable TC-Layer for all ATM/PTM related flavours
- Integrated POR, USB Undervoltage detection, Dying Gasp, Voltage Regulators
- IPv6 ready

Key Interfaces

- TDM/PCM Interface
- Smart-SLIC Interface (SSI) for seamless connectivity to XWAY™ SLIC100 products
- ADSL2/2+ Analog Hybrid Interface
- SDIO
- 2x 10/100/1000 MII/RMII/RGMII
- 16-bit DDR DRAM
- 16/8-bit NOR/NAND Flash memory
- 32-bit PCI 2.2 bus supports PCI, Mini PCI and CardBus
- 2x USB 2.0 host/device
- SPI with DMA support
- UART for RS-232, UART HW Flow Control
- EJTAG/JTAG, GPIO, EXIN

The Lantique™ XWAY™ ARX188 is the latest generation ADSL2/2+ single-chip solution targeted at feature rich IAD and Multi-Service Gateway designs with high throughput and Quality of Service (QoS) requirements.

Its dual CPU architecture with protocol acceleration and Gigabit Ethernet support guarantee ideal routing throughput, powerful enough to make it the central point of the end-user's home network. In combination with 802.11n solutions, the XWAY™ ARX188 offers unique performance with WLAN data rates well beyond 200Mbps. The XWAY™ ARX188 is best combined with Lantique's XWAY SLIC100 devices to add single or multi channel SLIC functionality.

The high performing architecture assures always perfect voice quality despite the potentially very heavy routing tasks performed by the gateway.

Internet Protocol Television (IPTV) applications benefit from the high routing capabilities as well as from the many special DSL Physical Layer features such as Erasure Decoding and Re-Transmission. The DSL digital front end and interoperability firmware is common to all Lantique ADSL2+ chipsets.

A wide range of energy saving features built into the solution enable IAD designs to meet the requirements listed in the EU's Code of Conduct (CoC) on Energy Consumption of Broadband Equipment.

Applications

- ADSL2/2+ WLAN 802.11b/g/n IAD
- ADSL2/2+ WLAN 802.11b/g/n Router
- ADSL2/2+ SOHO Router with VPN
- ADSL2/2+ Media Gateway

ADSL Features

- ITU-T G.992.1/3/5 (ADSL2/2+) Annexes A, B, I, J, M, and L
- ITU-T G.992.2 (G.lite) Annex A and ANSI T1.413 Issue 2
- DTAG UR2 and ETSI standards for ADSL over ISDN
- DSL Forum performance specifications TR-048/67 and TR-100
- Data Rates >28 Mbit/s downstream and >2.7 Mbit/s upstream
- Industry-leading ADSL Physical Layer for IPTV applications supporting INP Protection >2, Erasure Decoding, increased interleaver depth, super-extended framing and Re-Transmission

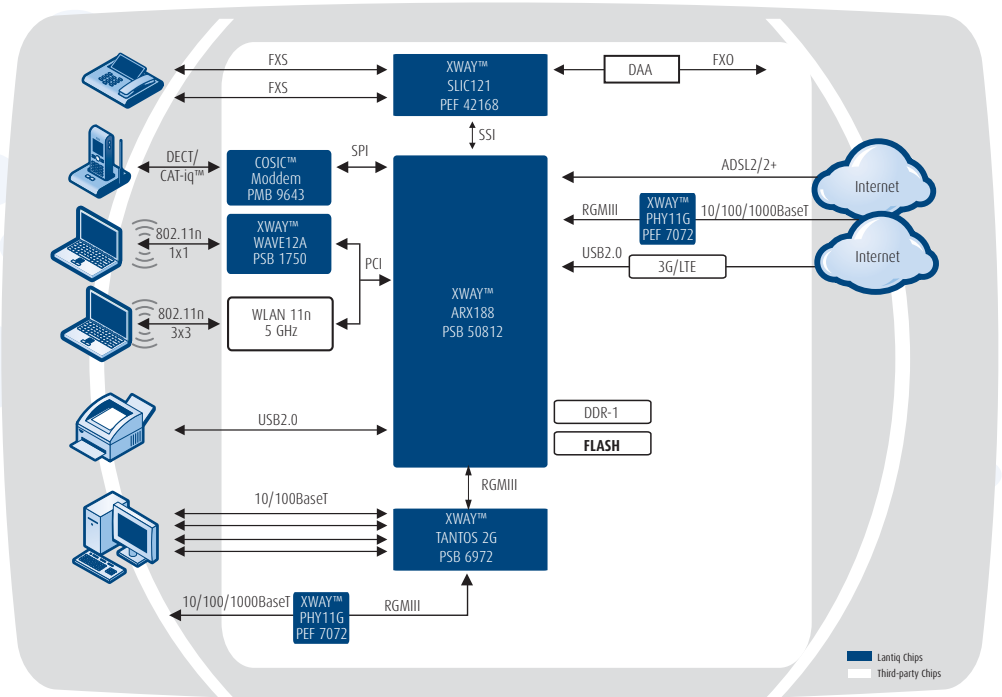
Lantiq™ XWAY™ ARX188

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Support Tool

- EASY KIT Reference Design
- System Overview, Hardware and Software Documentation
- Linux® based Board Support Package
- Complete Gateway Software Package

XWAY™ ARX188 Application Diagram



Product Summary

Product Name	Sales Code	Description	Package
XWAY™ ARX 188	PSB 50812	Single-chip solution for ADSL2/2+ IAD and Multi-Service Gateway	PG-LFBGA-304-2

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