



Lantiq™ XWAY™ AMAZON-SE

ADSL2/2+ Standard Entry Solution for CPE Applications

Features

- 32-bit Multithreading Protocol Processor
- HW acceleration for generic functions like CRC, various TC Layer support
- Programmable TC Layer for ATM, ATM header compression, EFM, ATM VCS, I.610 OAM F4/F5, ILMI, I.371 and R-037
- Protocol acceleration FW for MPoA, NAT, ATM/EFM bonding and others for CPU off-load
- Under voltage detection (UVD) with power on reset functionality saves external POR
- Real time clock (RTC), optionally with separate oscillator connection for low power mode

Physical Interfaces

- ADSL2+ Analog Hybrid Interface
- One 10/100/200 MII/Reverse MII/TMII interface
- 16-bit SDR DRAM
- 16/8-bit NOR/NAND Flash
- Memory interface
- Integrated 10/100 Base_T Ethernet Phy
- Multi Media Card Interface (SD/MMCI)
- USB 2.0 host/device
- SPI (Master/Slave)

Embedded System

- 32-bit MIPS 4KEc
procesor@133/266 MHz

XWAY™ AMAZON-SE is a next-generation ADSL2+ system-on-a-chip from Lantiq™.

This highly integrated solution is part of the Lantiq AMAZON product family and consists of ADSL DFE/AFE/LD, USB 2.0, Ethernet PHY and packet acceleration (Protocol Process Engine) for a cost-optimized ADSL2/2+ modem or router designed as a two-layered PCB. Amazon-SE further integrates SD/MMCI and SPI connectivity for WLAN and/or memory peripherals.

Lantiq™ XWAY™ AMAZON-SE targets the cost-sensitive broadband Customer Premises Equipment (CPE) market segment, in particular broadband equipment within residential and SOHO (Small Office/Home Office) environments. Amazon-SE comes with a complete development kit including reference designs, documentation, a complete Board Support Package (BSP) based on the Linux® operating system, as well as the eCoS platform with a compact memory footprint.

Applications

- ADSL2/2+ one port Ethernet bridge-modem
- ADSL2/2+ Ethernet + USB dual-port router
- ADSL2/2+ SOHO 4-port Ethernet router with WLAN

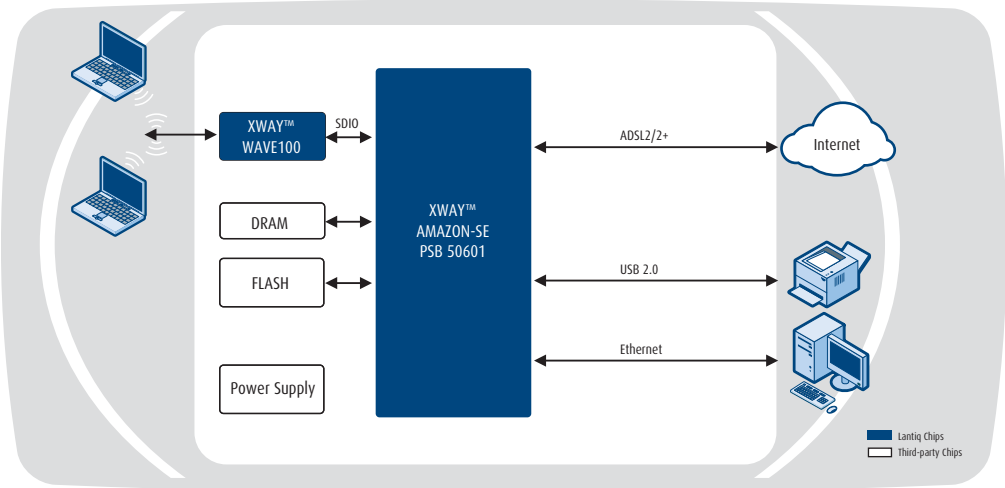
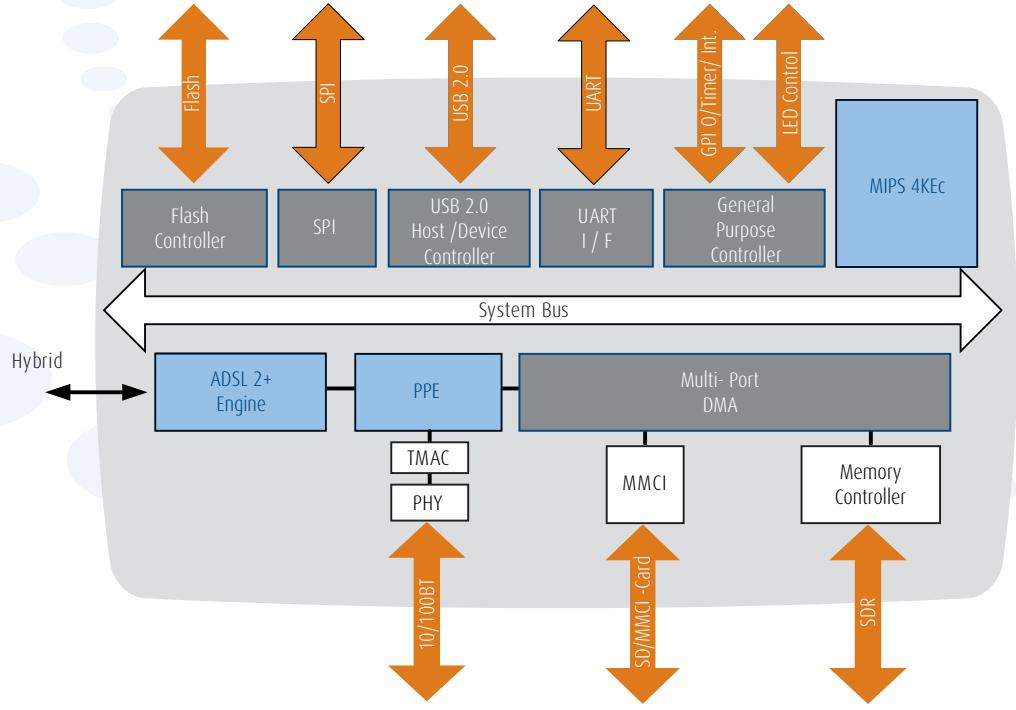
ADSL Features

- ITU-T G.992.1/3/5 (ADSL/2/2+) 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 WT-100
- Integrated Dying Gasp comparator

Lantiq™ XWAY™ AMAZON-SE

ADSL2/2+ Standard Entry Solution for CPE Applications

XWAY™ AMAZON-SE: Block Diagram (above) and Application Example (below)



Product Summary

Product	Sales Code	Description	Package
XWAY™ AMAZON-SE	PSB 50601	Single-Chip Solution for ADSL2/2+ Modem or Router	PG-LQFP-144



How to reach us: <http://www.Lantiq.com>

Published by Lantiq
85579 Neuburg, Germany

© 2009 Lantiq. All Rights Reserved.

Legal Disclaimer The information given in this Product Brief shall in no event be regarded as a guarantee of conditions or characteristics. With respect to any examples or hints given herein, any typical values stated herein and/or any information regarding the application of the device, Lantiq hereby disclaims any and all warranties and liabilities of any kind, including without limitation, warranties of non-infringement of intellectual property rights of any third party.

Information For further information on technology, delivery terms and conditions and prices, please contact the nearest Lantiq Office (www.Lantiq.com).

Warnings Due to technical requirements, components may contain dangerous substances. For information on the types in question, please contact the nearest Lantiq Office. Lantiq components may be used in life-support devices or systems only with the express written approval of Lantiq, if a failure of such components can reasonably be expected to cause the failure of that life-support device or system or to affect the safety or effectiveness of that device or system. Life support devices or systems are intended to be implanted in the human body or to support and/or maintain and sustain and/or protect human life. If they fail, it is reasonable to assume that the health of the user or other persons may be endangered.

Order Number: PB-e-0014-v1