Amazon

Single Chip ADSL2/2+ CPE Solution
PSB 50510

Infineon's Amazon PSB 50510 is a highly integrated, single-chip solution for ADSL2/2+ modems, routers and home gateways. With an embedded processor, analog front end and line driver, Amazon provides the core of an ADSL CPE system. Amazon integrates multiple interfaces allowing seamless connectivity with Infineon's extensive suite of home networking chips and third party solutions, offering customers a flexible and scalable platform on which to build a wide range of systems.

Amazon is the ideal CPE counterpart to Infineon's market-leading GEMINAX MAX ADSL2/2+ multi-channel Central Office chip set for a complete end-to-end ADSL2/2+ solution.

In order to shorten time to market and reduce development costs, the PSB 50510 is offered with a complete development kit consisting of reference designs, documentation and a complete networking software stack based upon the Linux® operating system.

Applications

Amazon can be used stand-alone or together with Infineon's home networking ICs to create a wide range of products from simple ADSL Ethernet bridges up to advanced ADSL Home or Small Office Home Office (SOHO) gateways that support WLAN and VoIP.

ADSL Modem Features

- Supported Standards
  - ITU-T G.992.3 (ADSL2) Annexes A, B, C, I, J, K, and L
  - ITU-T G.992.5 (ADSL2+) Annexes A, B, I, J, and L
  - ITU-T G.992.1 (G.dmt) Annexes A, B, and C
  - ITU-T G.992.2 (G.lite) Annexes A and C
  - ANSI T1.413 Issue 2
  - DTAG UR2 and ETSI standards for ADSL over ISDN
  - Conforms to DSL Forum performance specifications TR-048
- Data Rates up to 24 Mbit/s downstream and 2 Mbit/s upstream
- Echo cancellation (Spectrum Overlap support)

ATM Features

- I.363.5 Compliant AAL5 SAR with hardware accelerator
- TC layer with hardware accelerator
- 16 ATM VCs support
- I.610 OAM F4/F5 loopback
- Auto-configuration support per ILMI and DSL Forum TR-037
- ATM Traffic Management/Shaping: CBR, VBR-rt, VBR-nrt, UBR+ and UBR

Physical Interfaces

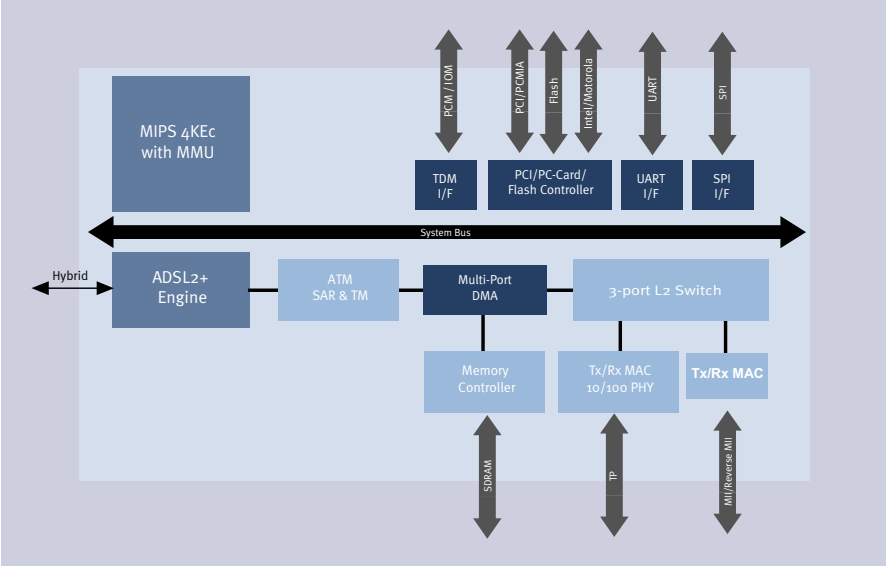
- 10/100 Ethernet PHY with Auto MDI-X
- 10/100 Ethernet MAC with MII/Reverse MII interface
- 32/16-bit SDRAM and 16/8-bit Flash memory interface
- 32-bit PCI 2.2 bus supports PCI, Mini PCI and CardBus interfaces
- 16-bit PC Card interface
- SPI
- UART
- Time Division Multiplex (PCM or IOM-2)
- EJTAG/JTAG
- 32 GPIOs

Embedded System

- A 32-bit MIPS 4KEc RISC processor running at 235 MHz
- DMA controller with up to 12 active channels

Analog Front End

- Low noise distortion
- Integrated tunable filters in Tx and Rx path
- Integrated Line Driver

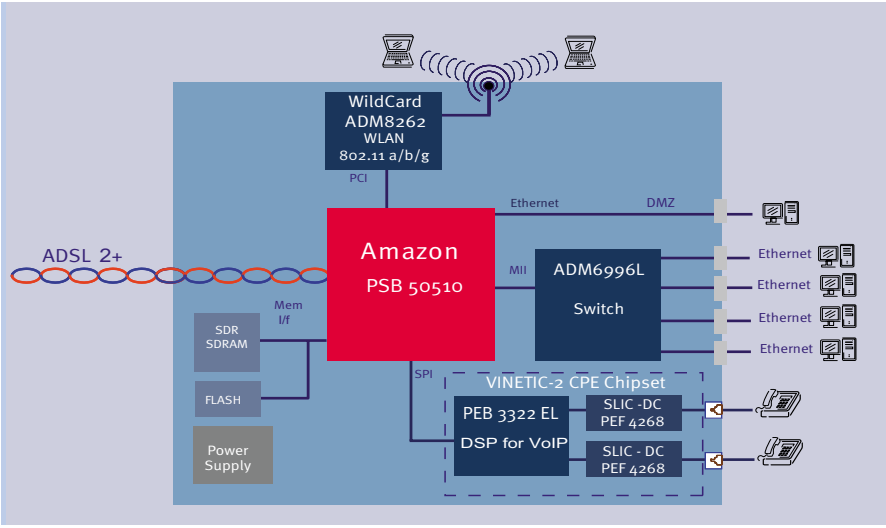


Amazon PSB 50510
Block Diagram

Ordering Information

IC

Product Sales Code	Description	Package
PSB50510	The Amazon is a highly integrated, single-chip solution for ADSL2 and ADSL2+ modems, routers and home gateways.	LBGA-256



ADSL2/2+ SOHO
Gateway with WLAN
and VoIP
Application Example

How to reach us:

http://www.infineon.com

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Information

For further information on technology, delivery terms and conditions and prices please contact your nearest Infineon Technologies Office.

Warnings

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