AMAZON-SE

ADSL2/2+ Standard Entry Solution for CPE Applications
PSB 50601

AMAZON-SE is a next-generation ADSL2+ system-on-a-chip from Infineon®. This highly integrated solution is part of the Infineon Amazon product family and consists of ADSL DFE/AFE/LD, USB 2.0, Ethernet PHY and packet acceleration (PPE - 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.

Infineon 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) 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 (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 WT-100
- Integrated Dying Gasp comparator

Embedded System
- 32-bit MIPS 4KEc processor@133/266MHz

Protocol Processing
- 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 TR-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
- ADSL2/2+ 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 BaseT Ethernet Phy
- Multi Media Card Interface (SD/MMCI)
- USB 2.0 host/device
- SPI (Master/Slave)

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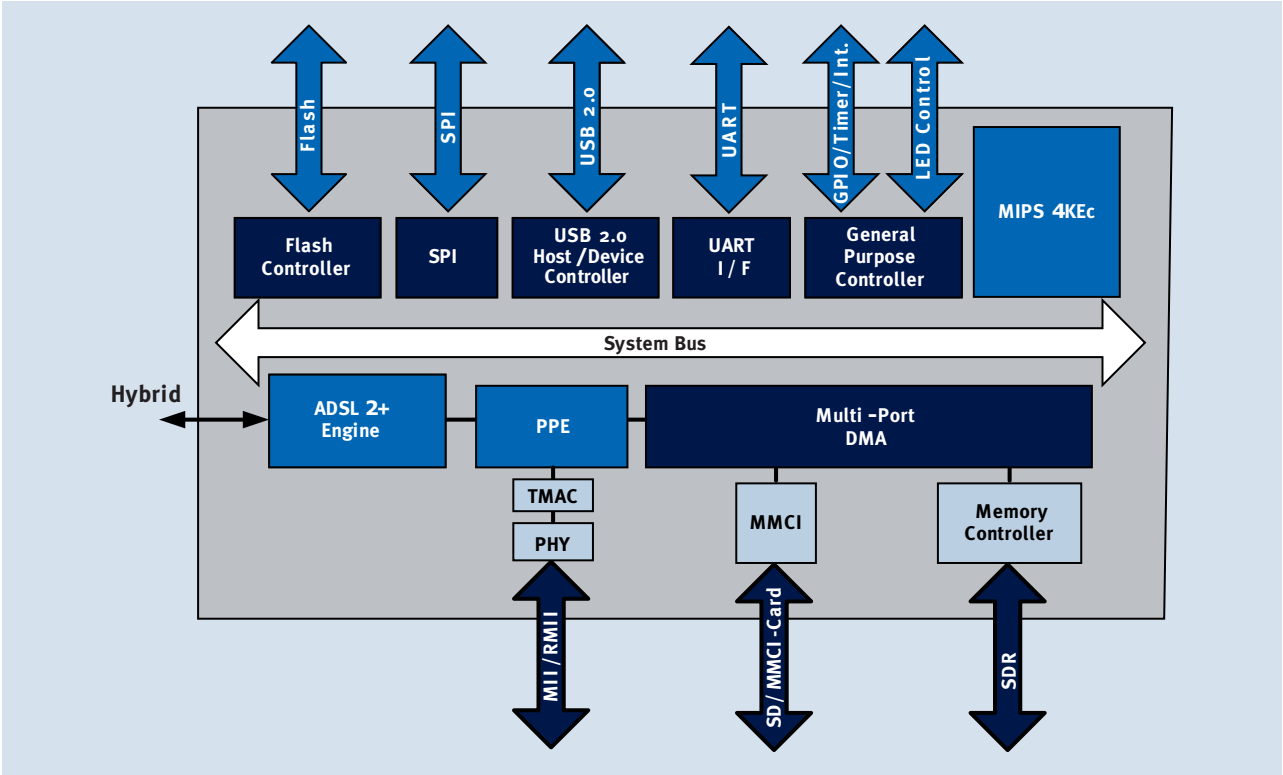
Communication Solutions

Never stop thinking

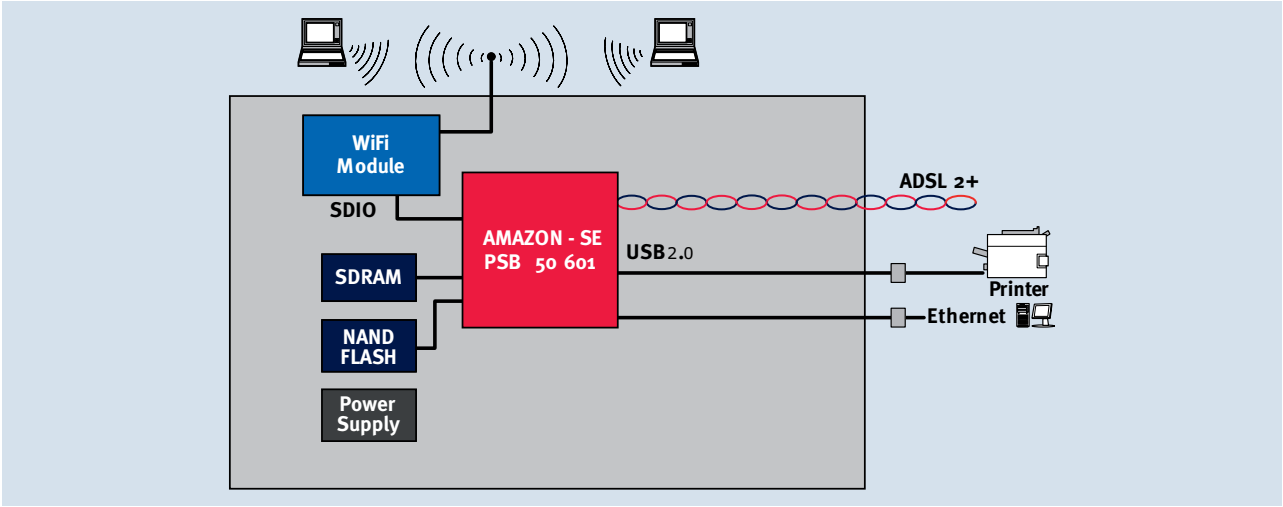
AMAZON-SE Block Diagram



Product Summary

Type	Sales Code	Description	Package
AMAZON-SE	PSB 50601	Single-Chip Solution for ADSL2/2+ modem or router	PG-LQFP-144

AMAZON-SE Application Diagramm



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Information

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

Warnings

Due to technical requirements, components may contain dangerous substances. For information on the types in question, please contact the nearest Infineon Technologies Office.

Infineon Technologies components may be used in life-support devices or systems only with the express written approval of Infineon Technologies, 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.

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