



Network Processor with Integrated Ethernet Switch and USB2.0 Support

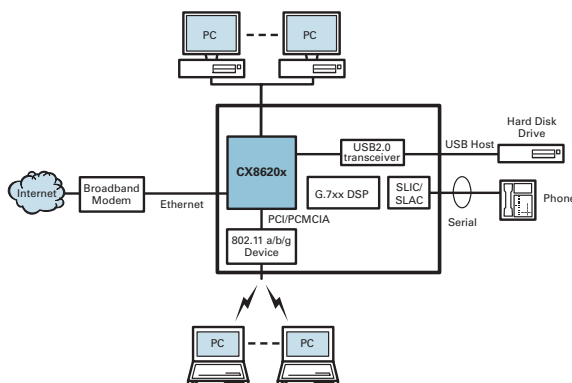
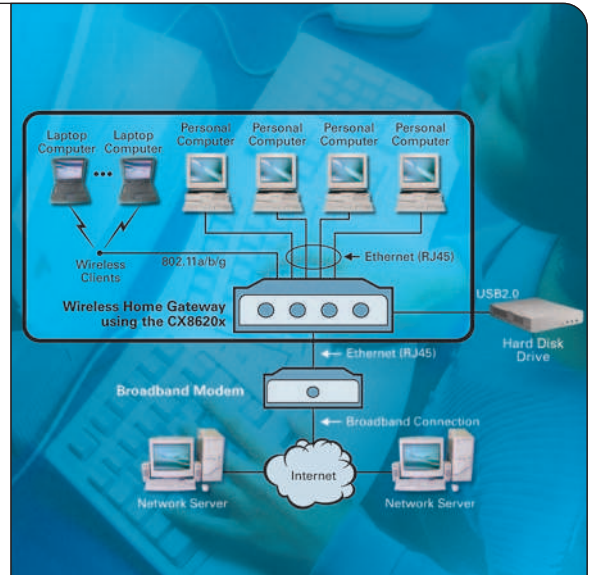
CX86201/2

Single-Chip Solution with Integrated Five-Port Ethernet Switch and USB2.0 Host Support

Conexant's broadband communications portfolio includes a comprehensive suite of semiconductor solutions that enable the digital home and information network. The Conexant CX8620x Network Processor supports complete networking system solutions for a wide variety of mainstream applications in the residential and SOHO environments. Based on a 180 MHz ARM926, this network processor is a single-chip solution with an integrated switch that supports five 10/100 Mbps Ethernet ports with auto MDIX capabilities.

In a broadband gateway application, the CX8620x network processor can provide Internet access sharing capability for multiple PCs, while supporting Ethernet, 802.11 through a PCI interface and any USB2.0 device including hard disk drives and printers. For WAN access, the unit supports Ethernet connectivity interoperable with any broadband modem. It is the ideal platform for a configurable broadband gateway design that needs to accommodate many diverse WAN/LAN topologies.

The device complies with IEEE 802.3 specification and includes five embedded DSP-based 10Base-T/100Base-TX transceivers. An auto negotiation function determines the selection of either the 10Base-T or 100Base-Tx mode. Typical applications would be a wireless home gateway including an Ethernet WAN port to connect to a broadband modem, four Ethernet LAN ports, an 802.11 a/b/g access point connecting any Wi-Fi compatible device and a home storage device connected through the USB2.0 host.



Secure 802.11a/b/g Gateway with Storage and VoIP Support

Distinguishing Features

- Single-Chip, high-performance processor with an integrated five-port Ethernet switch supporting auto MDIX
- PCI host for a wide range of applications including the 802.11 a/b/g wireless protocols and video compression devices
- Advanced Serial and VoIP capabilities (only CX86202)
- An MMU for Linux and WinCE support
- Supports high speed secure VPN implementations

Part Number CX86201/2

Description Network Processor with Integrated Ethernet Switch and USB2.0



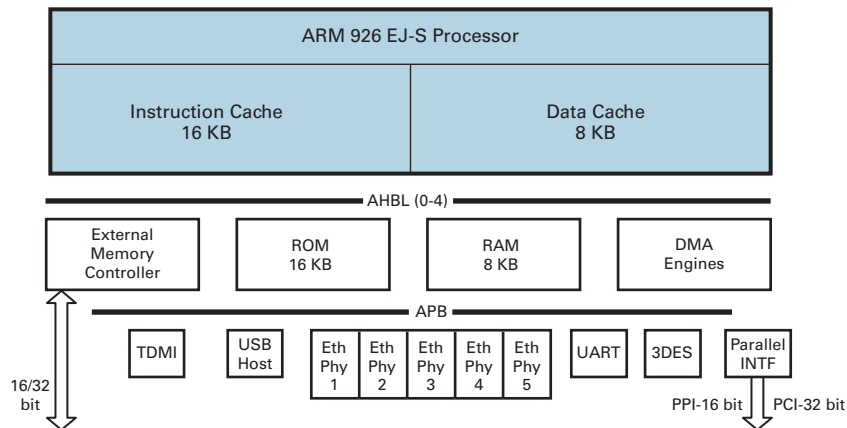
CX8620x Features and Versions

Features

- 180 MHz ARM923EJS-based processor
- 16 KB of I-Cache and 8 KB of D-Cache
- 5 integrated Ethernet ports with Auto MDIX support
- PCI interface
- Supports up to 16 MB of Flash and 64 MB of SDRAM
- Embedded UART interface for external modem applications
- TDMI interface for VoIP

Versions

- CX86202 for a wide range of home networking applications including wired and wireless gateways, printer servers, home storage, virtual private networks and Voice over IP in a 292-pin BGA
- CX86201 for basic wired and wireless gateways in a 233-pin BGA with a PCI interface



CX8620x Architecture Diagram

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