# Home Network Processors

Conexant's family of Home Network Processor (HNP) products are designed and priced with the small business and home networking user in mind. The HNP series supports software functions to implement a variety of complete networking system solutions including:

- · Shared internet access via same connection
- · Printer/peripheral sharing
- · File and application sharing
- · Real-time multiplayer gaming

#### Home PhoneLine Networking Alliance (HomePNA)

Founded in 1998 by Conexant and ten other major industry leaders, the Home Phoneline Networking Alliance (PNA) is an industry association formed to define a standard for and drive the adoption of home networking over existing phone lines.

## HomePlug Powerline Alliance (HomePlug)

HomePlug is a nonprofit industry association founded in April 2000 by Conexant and twelve other major industry leaders. The association is committed to fostering an open specification for home networking products and services built to leverage the worldwide pervasiveness of residential powerlines.

The market opportunity for both of these standards, along with others, is growing as the number of households with more than one computer increases. Consumers will want to network multiple electronic devices in their homes, sharing high-speed Internet access among all their connected products for a wide range of applications including voice telephony, PC networks and gaming.

## **CX82100 Home Network Processor** (158 MIPS Processor Targeting Firewall Applications)

Conexant's CX82100 Home Network Processor (HNP) is a single-chip, high-performance, ARM940T-based processor integrated with multiple network interface hardware functions and packaged in a 196-pin CABGA. This 158 MIPS processor supports software functions to implement a wide variety of complete networking system solutions for small business, SOHO and consumer networking applications.

This network processor is designed and priced for the small business and home networking market. Other network processors, designed for commercial applications, are not optimized for typical small business and home networking applications, such as residential gateways, firewalls, switches and bridges. The CX82100 will enable our customers to develop and market cost-effective, high-performance products.

In addition to a 144 MHz ARM940T core, the processor includes a dedicated high-speed program memory bus, a Universal Serial Bus (USB) port, an expansion bus, various General Purpose Input/Output (GPIO's) and timers and two 802.3 MACs. Combining these capabilities on a single chip, the CX82100 provides a cost-effective solution for residential gateways, firewalls and bridges.

#### **Features**

- Single-chip, high-performance controller with integrated network interfaces
  - 158 MIPS ARM940T processor
  - Advanced Microcontroller Bus (AMB)
- Advanced Microcontroller Bus Architecture (AMBA) with two internal buses
- Advanced System Bus (ASB)

