



# Integrated Software on Silicon™

## Broadband Communications Software Suite

Conexant's portfolio includes a comprehensive suite of semiconductor solutions for broadband communications, enterprise networks and the digital home. Conexant's Integrated Software on Silicon™ (ISOS) platform consists of a comprehensive suite of broadband communications software that is tightly integrated with the company's line of processors, physical layers (PHYs) and digital signal processors (DSPs)\*. The unique, modular architecture of ISOS enables Conexant to continually integrate new features into its ISOS platform to help customers lower costs, streamline product development, and speed their time-to-market with feature-rich broadband equipment. By including the same core operating and applications software, the Conexant ISOS solution can reduce first-time and subsequent design cycles by up to 50 percent, and also enable product customization. In addition, key features such as integrated auto configuration and management protocols make it easier to not only monitor and upgrade existing systems, but also support the rollout of new digital subscriber line (DSL) services and reduce the cost of overall deployment for service providers.

Conexant's ISOS software is unique in that it not only includes all key communication protocol stacks (i.e., ATM, transmission control protocol/Internet protocol [TCP/IP], but also integrated applications that are highly desired by the market, such as a fully integrated firewall and network address translation (NAT) solution for secure LAN/WAN activities, and universal plug-n-play (UPnP) capabilities for home and office network connectivity. Additional security features include DMZ ports, intrusion detection, protection against denial of service (DoS) attacks, and logging of session, blocking events, and intrusion events.

Over 20 million broadband terminations already use ISOS as the processing core because it offers the most comprehensive, leading-edge functionality available in the industry. By designing and optimizing the software to work in conjunction with the silicon, Conexant is able to create a seamless system design solution and achieve the best possible system price/performance outcomes for its customers.



### Distinguishing Features

- Enables product customization and reduces first-time and subsequent design cycles by up to 50 percent
- Allows for integration of new features to lower costs, streamline product development and speed their time-to-market
- Integrated with Conexant's line of processors, PHYs and DSPs.

<b>Part Number</b>	Integrated Software on Silicon
<b>Description</b>	Broadband Communications Software Suite

\*GlobespanVirata legacy product



Conexant has a broad portfolio of semiconductor products, including:

- DSL, dial-up, and cable modem solutions
- Home network processors
- Broadcast video encoders and decoders
- Digital set-top box components and system solutions

Conexant also offers wireless data and networking solutions that includes HomePlug, HomePNA, and WLAN (802.11) components and reference designs.

## Integrated Software on Silicon Features and Benefits

- Supports Conexant's Argon, Helium, and Nitrogen product lines
- ATM protocol stack
- Modular IP stack
- Bridging and routing capabilities
- Traffic management functions
- Flexible integrated management interface
- Simple network management protocol (SNMP) agent and tools
- Embedded Web server
- Auto-configuration
- Stateful packet inspection (SPI) firewall and network address translation (NAT) security solution
- UPnP for seamless networked device interconnectivity
- Voice module integration for voice over DSL (VoDSL) and voice over Internet protocol (VoIP)
- Optional integrated Internet protocol security (IPsec)/virtual private network (VPN) solution
- Reference designs available for quick product-line extension
- Customer development environment and tools available for product customization

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