

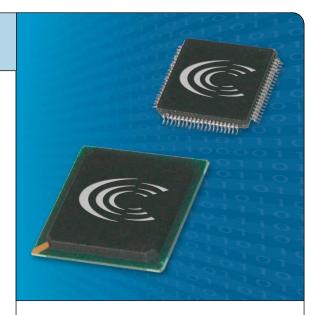
# VDSL2 CPE Chipset

## Accelity CPE

Conexant's portfolio includes a comprehensive suite of semiconductor solutions for broadband communications and the digital home.

Conexant's Accelity™ customer premises equipment (CPE) chipset offers full-rate, very high speed DSL (VDSL) and VDSL2 performance for asynchronous transfer mode (ATM) and packet-based client-side terminals. Accelity VDSL CPE solutions provide advantages in performance, functionality, and cost, and are targeted at modems, Ethernet bridges/routers, wireless local area network (WLAN) and broadband residential gateways, and integrated access devices (IADs). The chipsets are based on the company's field-proven Integrated Software on Silicon (ISOS) platform, which minimizes software development time and provides a fast migration to VDSL for the company's current DMT ADSL customers. The Accelity CPE chipset is fully programmable, high-performance solution for triple-play broadband service.

The chipset includes a VDSL digital signal processor (DSP) and an analog front end (AFE) chip. The DSP integrates an Ethernet media access control (MAC) with media-independent interface (MII) for LAN connectivity. The Accelity CPE design capitalizes on Conexant's many years of successful real-world DSL field experience and comprehensive understanding of standards-based xDSL technology. To accelerate time-to-market, complete reference designs are available.



## **Distinguishing Features**

- Compliant with ITU-T VDSL2/G.993.2, VDSL/G.993.1 ITU-T, ANSI T1-424, ETSI TS 101 270, and China MII VDSL standards
- Long-reach support US0 Band
- Fully integrated ATM/PTM support
- DSP integrates interleave memory required by high speed video applications
- AFE integration of Tx and Rx filters
- Programmable transmit power levels and PSD masks
- Extensive Layer 2 Functionality for Gateways, Routers, Bridges and Modems with Conexant's ISOS software suite

Part Number Accelity CPE

Description VDSL2 CPE Chipset

### **Product Features**

- 10BaseT/100Base-TX interface (Integrated PHY)
- USB 1.1 interface
- PCMCIA and miniPCI master interface
- High speed SDRAM interface
- · Expansion bus to connect flash memory
- Complete single board reference design
- Full networking software stack for bridge/router available in source code
- Standards compliant functionality supports: ITU-T G.993.2, ITU-T G.993.2, ANSIT1.424, ETSITS 101 270
- Gateway via an 802.11a/b/g card connected to the on-chip PCMCIA and miniPCI interface
- Virtual private network (VPN) solution via an embedded encryption engine

### Software Features

- Security: Firewall with DHCP and NAT, PPTP, L2TP and IPSec
- Ease of use: universal plug and plan (UPnP)
- · Configuration: Web-based configuration and management
- ATM support: operation and maintenance (OAM), quality of service (QoS), integrated local management interface (ILMI) and user-network interface (UNI)
- Internet protocol (IP) support: Standalone Packet Modem, bridge-mode, RIP1/2, PPPoA, PPPoE, and Classical IP

#### Conexant Product Portfolio

The company's broad portfolio of semiconductor products also includes client-side DSL, cable, and dial-up modem solutions; fiber optic system-on-chips; broadcast video encoders and decoders; digital set-top box components and systems solutions; and IEEE 802.11a/b/g/n-compliant WLAN chipsets. Additional products include a complete line of asymmetric and symmetric DSL central office solutions, which are used by service providers worldwide to deliver broadband data, voice, and video over copper telephone lines.

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