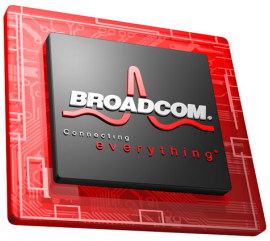
BROADCOM®
Connecting everything®

BCM6345 PRODUCT Brief



SINGLE-CHIP ADSL2 CPE ROUTER

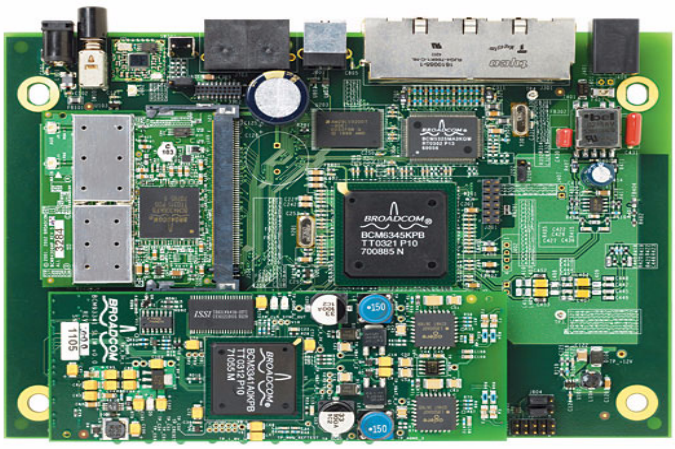
FEATURES

- Highly integrated, single-chip ADSL2 CPE bridge/router solution with seamless, multiuser, support for Ethernet, USB, 802.11b/g and Bluetooth™ networking technologies.
- G.992.1/G.992.2/G.992.3/T1.413 compliant ADSL transceiver and AFE with full standards support.
- High-performance MIPS32TM CPU with MMU.
- High-performance ATM SAR for enhanced ATM VC management, traffic shaping, and QoS.
- 10/100 Mbps IEEE 802.3u Ethernet MAC and PHY with an MII interface.
- USB 1.1 device interface with integrated transceiver.
- PCMCIA expansion bus for glueless interface to external peripherals.
- Separate interfaces for Flash and SDRAM.
- Extensive chip power management, EJTAG, GPIO, UART.

SUMMARY OF BENEFITS

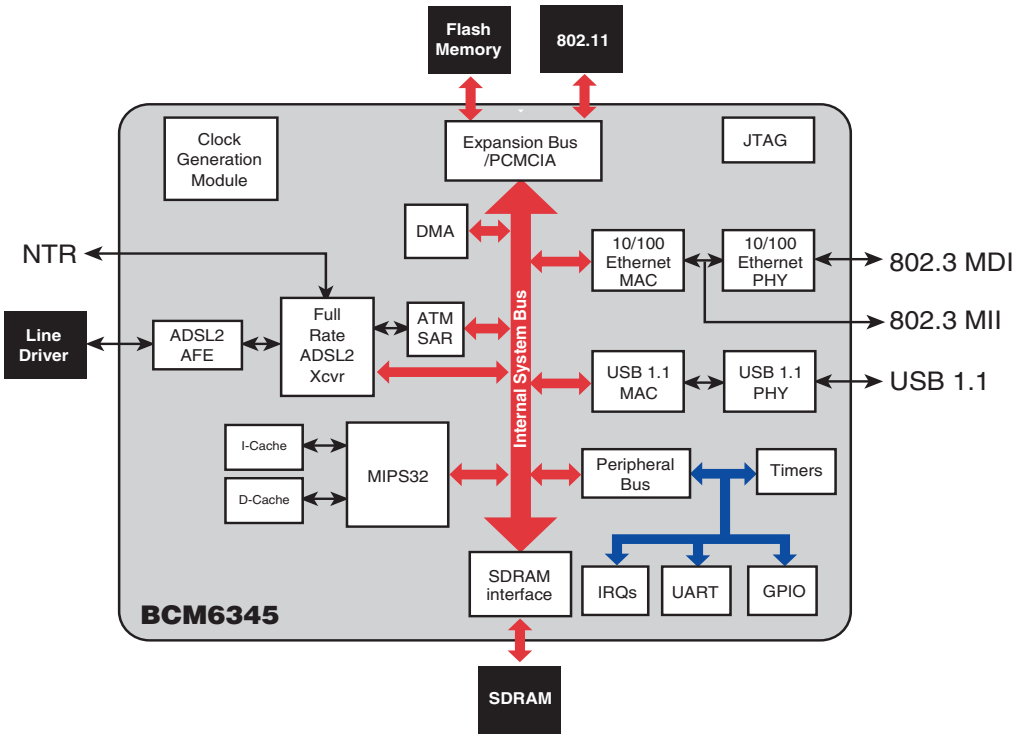
- Unmatched integration greatly reduces the bill of materials to enable the lowest possible product cost for Annex A, B, C, J, K and L ADSL routers.
- High-resolution A/D and D/A converters eliminate complex, expensive external filtering.
- High-performance MIPS32 CPU for advanced application development, with industry-standard tool chains and operating systems.
- Support for bridging and routing between ADSL and LAN interfaces on a single chip significantly reduces development time, decreases time-to-market, and increases product flexibility.
  - 10/100 Mbps Ethernet MAC and PHY interface with MII and auto-MDIX support to eliminate external Ethernet components and reduce cabling issues.
  - Fully USB 1.1 compliant interface enables simple Plug and Play installation.
  - 802.11b/g wireless network support via PCMCIA host interface.
  - Glueless expansion capability to Broadcom's multiport Ethernet, WiFi, Bluetooth, security, and VoIP chips.
- Provides consistent, proven software architecture across all Broadcom CPE gateway devices.

ADSL2 Integrated Access Device



BROADCOM

OVERVIEW



The BCM6345 combines a G.992.1/G.992.2/G.992.3/T1.413-compliant ADSL2 transceiver and AFE with a high-performance MIPS32™ CPU, 10/100 Ethernet and USB 1.1 interfaces, PCMCIA and programmable 16-bit external bus interfaces into a single chip.

The embedded ADSL2 transceiver and AFE support the development of full-rate G.dmt, T1.413, and G.Lite ADSL with support for G.997.1, G.994.1, I.432 TC layer, dual-latency framing, NTR, and embedded operations channels for remote management of the CPE.

The embedded MIPS32 CPU, with Broadcom-supplied software, controls the ADSL modem, performs high-performance bridging and routing between the ADSL2 WAN interface and LAN interfaces, and allows for customer application development with industry-standard EJTAG/Ethernet tool chains and development environments.

A full-featured ATM SAR supports hardware traffic shaping, management, and QoS for multiple VCs.

The embedded USB 1.1 transceiver and 10/100 Ethernet MAC and PHY with auto-MDIX provide connectivity to a PC host. The PCMCIA interface supports seamless connectivity to wireless networking solutions such as Broadcom's 802.11a/b/g or Bluetooth™ chipsets.

The BCM6345 enables a complete ADSL2 CPE router to be assembled with a minimal set of additional components. The result is the most cost-effective solution for a variety of ADSL2 CPE bridging and routing applications.

For more information contact your local Broadcom sales representative.

Connecting everything®

BROADCOM®

BROADCOM CORPORATION
16215 Alton Parkway, P.O. Box 57013
Irvine, California 92619-7013

6345-PB04-R 06/07/04

Phone: 949-450-8700
Fax: 949-450-8710
E-mail: info@broadcom.com
Web: www.broadcom.com