

everything<sup>®</sup>





## BCM6348 SINGLE-CHIP ADSL2+ CPE CHIP

## FEATURES

- Single-chip ADSL2+ CPE device with integrated CPU, transceiver and AFE
- Standards compliant for worldwide G.992.1/G.992.2/ G.992.3/G.992.5/T1.413 (Issue II) deployments supporting Annex A, B C, J, I, L, and M
- High-performance MIPS32<sup>™</sup> CPU with MMU and TLB support
- Hardware ATM SAR for enhanced ATM VC management, traffic shaping, and QoS
- Two 10/100-Mbps IEEE 802.3u Ethernet MACs and one PHY with auto-MDIX
- Configurable USB host and device interface with integrated transceiver
- Multi-format peripheral expansion bus with PCI, mini-PCI, CardBus, and PCMCIA support
- Serial and parallel FLASH support and high-speed SDRAM interface
- Extensive on-board chip power management, EJTAG, GPIO, and UART
- 1.2-mm package ball pitch for reduced PCB design complexity
- Complete protocol and application software support package

## SUMMARY OF BENEFITS

- Unmatched integration greatly reduces bill of materials cost to enable lowest possible product cost for worldwide deployment of ADSL modems, routers, and gateways
- High-resolution A/D and D/A converters minimizes system bill of materials costs by reducing the need for external filtering
- High-performance MIPS32 CPU supports advanced application development and future downloadable service models with industry-standard tool chains and operating systems
- Support for wire-speed bridging and routing between ADSL and LAN interfaces on a single-chip significantly reduces development time, decreases time-to-market, and increases product flexibility
- Two 10/100-Mbps Ethernet MACs with MII and one 10/ 100-Mbps Ethernet PHY interface with auto-MDIX supports true Ethernet-to-Ethernet bridging and routing as well as DMZ interface applications
- Dual USB host and device interfaces enable simultaneous Plug and Play connection of PCs and peripheral devices including printers and hard disks
- High-speed external bus with industry standard PCI, mini-PCI, CardBus, and PCMCIA support provides glueless interface to Broadcom and 3<sup>rd</sup> party voice, WiFi<sup>®</sup>, security, video encoding and decoding and other peripheral chipsets
- Broadcom-enhanced protocol and applications software provides consistent, proven software architecture across all Broadcom DSL CPE and PON ONT chipsets



## BCM6348-Based ADSL2+ CPE Modem

