



# NETLINK™ BCM5788(M) PRODUCT Brief



## SINGLE-CHIP 32-BIT PCI GIGABIT CONTROLLER WITH PHY

### FEATURES

- **Single chip device for both notebook and desktop LAN on Motherboard (LOM) or Network Interface Card (NIC) applications**
- **Integrated 10/100/1000BASE-T transceiver**
  - 10/100/1000BASE-T triple-speed MAC
  - PCI v2.2, 32-bit/33-MHz host interface
- **Advanced power management, ACPI compliance**
- **Performance features**
  - TCP, IP, UDP checksum
  - CPU task offload
  - Adaptive interrupts
- **Robust manageability**
  - Wake-on LAN (WOL)
  - Out-of-box mode WOL
  - PXE 2.0 remote boot
- **3.3V I/Os (5V tolerant)**
- **JTAG**
- **Industry's smallest 10/100/1000 MAC+PHY solution that is optimized for notebook and desktop NIC and LOM applications**

### SUMMARY OF BENEFITS

- **Ultra-low power for notebook designs**
  - 0.13 $\mu$  CMOS design allows industry's lowest power
  - Advanced power management
- **Enables notebook and desktop PC products for all segments**
  - Footprint-compatible with 4401, a 10/100 companion chip
  - Allows one board layout for both Gigabit and Fast Ethernet applications
- **Power optimized through reduced CPU utilization**
  - Adaptive interrupts minimizes calls to the PC's CPU
  - TCP/IP offloads reduce CPU burden significantly
  - Reduces power consumption of PC processor
  - Allows use of lower power/performance PC processor
- **Space savings for LOM**
  - 196-pin HBGA package
  - No external memory
  - Integrated power circuitry reduces BOM costs

