BROADCOM®

Connecting e v e r y t h i n g ®

BCM5721
PRODUCT Brief

10/100/1000BASE-T CONTROLLER WITH INTEGRATED TRANSCEIVER

FEATURES

- **Single-chip device for server LAN-on-Motherboard (LOM) or network interface card (NIC) applications**
- **Integrated 10/100/1000BASE-T transceiver**
  - 10/100/1000BASE-T triple-speed MAC
  - High-speed RISC core with 24-KB cache
  - SMBus 2.0 controller
  - On-chip voltage regulation
  - Wake-on-LAN (WOL) power switching circuit
- **PCI Express host interface**
  - 1x lane
  - Four-pin interface
  - Functionality identical to PCI
- **Performance features**
  - TCP, IP, and UDP checksum
  - Microsoft® Large Send Offload
  - Large burst read
  - Interrupt coalescing
- **Industry-compliant manageability features**
  - IPMI 1.5 support
  - Standards-compliant WOL
  - Innovative out-of-box mode WOL
  - Hardware power switching
- **3.3V I/Os (5V tolerant)**
- **JTAG**

SUMMARY OF BENEFITS

- **Wirespeed performance increases user performance**
  - PCI Express provides wirespeed non-blocking throughput
  - TCP/IP offloads significantly reduce utilization of CPU
  - TCP/IP offloads significantly increase throughput to enable faster downloads of large files
- **Industry's smallest GbE form factor enables easier motherboard design**
  - Innovative design reduces footprint to 67% smaller than competing solutions
  - 15 x 15-mm package
  - Integrated WOL switching eliminates external power switching components
- **IPMI 1.5 remote manageability reduces IT costs**
  - Support for standards-based manageability allows IT managers to receive automatic alerts when PC support issues occur
  - Remote power-on/off features allow IT managers to power cycle PCs to address issues

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