



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