

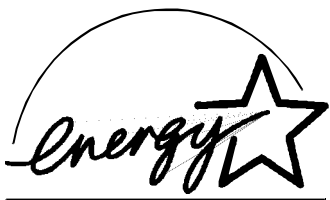
PhoenixBIOS 4.0™ Support for the Intel® 82430NX PCI Chip Set

Features of the Intel 82430NX

- ISA or EISA option
- Support Intel Pentium processors up to 100mhz
- Dual processor support
- Power management on ISA option
- Synchronous operation of the CPU and PCI clocks

PhoenixBIOS support for the Intel 82430NX PCI Chip Set

- System and BIOS Shadowing
- Flash ROM and Flash Update Utility
- Boot Block Recovery Mode
- Plug and Play
- BIOSEdit to control programmable features



Features of the Intel 82430NX PCI Chip Set

The Intel 82430NX PCI chip set is the first desktop dual processing solution from the company that first introduced PCI and the Pentium™ processor. The 82430NX supports several features including, the Pentium processor family up to 100MHz, power management, PCI bursting, 64-bit data paths, and a highly integrated ISA or EISA I/O bus logic. The modular design of the 82430NX PCI chip set provides system builders many price/performance points.

The Intel 82430NX PCI chip set has an ISA or EISA option available. The ISA options is comprised of three chips and the EISA option has two.

ISA option chips include:

- 82433NX Local Bus Accelerator (LBX) components — High performance data and address path, and incorporates five integrated buffers to increase performance of Host and PCI interfaces
- 82434NX PCI/Cache Memory Controller (PCMC) — Cache and main memory DRAM controllers, and a Host/PCI bridge
- 82378ZB System I/O (SIO) — Bridge between PCI and ISA, integrates common I/O functions, and provides power management

EISA option chips include:

- 82375EB/SB PCI/EISA Bridge (PCEB) — Interface bridge between PCI and EISA bus and implements the PCI central functions
- 82474EB/SB EISA System Component (ESC) — Implements system functions (e.g., timer/counter, DMA, and interrupt controller) and EISA subsystem control functions

Features available in the Intel 82430NX PCI chip set include:

- Support for Intel Pentium processor at iCOMP 815/100, 735/90, and 610/75
- 66MHz CPU bus speeds
- Power Management for ISA version of 82430NX: SMM, SMI, Stop Clock, and APM
- Fast on/off mode
- Integrated Tag RAM for cost savings on second level cache
- 64-bit interface to DRAM memory
- synchronous operation of the CPU and PCI clocks
- Five integrated write posting and read prefetch buffers increase CPU and PCI performance
- 256K - 512K L2 Cache Support
- PCI burst write capability
- Byte parity support for the host and main memory buses
- Flash ROM support

Special PhoenixBIOS Support for PCI Operation

- Modification of core BIOS to initialize and support PCI
- Support for PCI bus configuration
- Support of expansion bus capability
- Optionf for Plug-and-Play capabilities

Special BIOS Requirements of Power Management

Phoenix has modified its industry leading PhoenixMISER software to meet the power management requirements of desktop PCs:

- Modification of core BIOS to support Power Management
- BIOS support for APM (Advanced Power Management) Version 1.1
- Enhanced Setup to support Power Management configuration
- Support for all Power Management devices collectively and/or individually

Special BIOS Enhancements to Support the Intel Pentium Processor Family

The introduction of the Pentium class processors has created a series of new demands for system software. To realize the full potential of these new processors, Phoenix has developed and implemented several system software changes:

- Extensions to core BIOS routines to correctly identify specific Pentium processors
- Processor operational speed calculation
- Check for internal cache and enable
- Initialize chip set with appropriate values to support processor type, speed, and cache
- Initialize APIC
- Build MPS table
- BIOS support of power management modes
- Plug and Play support

PhoenixBIOS 4.0 -- Worldwide Support and Custom BIOS Solutions

Phoenix Technologies, with development offices around the world, provides local support to manufacturers, system integrators, and system designers. In addition to providing standard BIOS support, as the leading BIOS supplier of PCI, Plug and Play, and power managed systems, Phoenix also provides highly customized desktop solutions for today's successful manufacturers.

But today's manufacturers require more from their firmware supplier. They need a partner who can not only meet their current firmware needs, but who can work with them to identify and prepare for new opportunities in the expansion of the computer market. For today's most successful PC suppliers, Phoenix Technologies Ltd. is that technology partner.

Contact your Phoenix sales or support representative for information on the latest silicon availability.