82430LX/82430NX PCIset

- Supports the Pentium® Processor at 60 and 66 MHz (82430LX)
- Supports the Pentium Processor at ICOMP™ Index 735\90 MHz, Pentium Processor at ICOMP Index 815\100 MHz, and Pentium Processor at ICOMP Index 610\75 MHz
- Supports Uni-Processor (UP) or Dual-Processor (DP) Configurations
- Interfaces the Host and Standard Buses to the PCI Local Bus
  - Up to 132 MBytes/Sec Transfer Rate
  - Full Concurrency Between CPU Host Bus and PCI Bus Transactions
- Integrated Cache Controller Provided for Optional Second Level Cache
  - 256 KByte or 512 KByte Cache
  - Write-Back or Write-Through Policy (82430LX)
  - Write-Back Policy (82430NX)
  - Standard or Burst SRAM
- Integrated Tag RAM for Cost Savings on Second Level Cache
- Supports the Pipelined Address Mode of the Pentium Processor for Higher Performance
- Provides a 64-Bit Interface to DRAM Memory
  - From 2 MBytes to 512 MBytes of Main Memory
  - 70 ns and 60 ns DRAMs Supported
- Optional ISA or EISA Standard Bus Interface
  - Single Component ISA Controller
  - Two Component EISA Bus Interface
  - Minimal External Logic Required
- Supports Burst Read and Writes of Memory from the CPU and PCI Buses
- Five Integrated Write Posting and Read Prefetch Buffers Increase CPU and PCI Performance
- Host CPU Writes to PCI Converted to Zero Wait-State PCI Bursts with Optional TRDY# Connection
- Integrated Low Skew Host Bus Clock Driver for Cost and Board Space Savings
- PCIset Operates Synchronous to the CPU and PCI Clocks
- Byte Parity Support for the Host and Main Memory Buses
  - Optional Parity on the Second Level Cache

The 82430LX/82430NX PCIsets provide the Host/PCI bridge, cache/main memory controller, and an I/O subsystem core (either PCI/EISA or PCI/ISA bridge) for the next generation of high-performance personal computers based on the Pentium processor. System designers can take advantage of the power of the PCI Local bus for the local I/O while maintaining access to the large base of EISA and ISA expansion cards, and corresponding software applications. Extensive buffering and buffer management within the bridges ensures maximum efficiency in all three bus environments (Host CPU, PCI, and EISA/ISA Buses).

The 82430LX PCIset consists of the 82434LX PCI/Cache Memory Controller (PCMC) and the 82433LX Local Bus Accelerator (LBX) components, plus, either a PCI/ISA bridge or a PCI/EISA bridge. The PCMC and LBX provide the core cache and main memory architecture and serve as the Host/PCI bridge. For an ISA-based system, the 82430LX PCIset includes the 82378ZB System I/O (SIO) component as the PCI/ISA bridge. For an EISA-based system, the 82430LX PCIset includes the 82375EB/SB PCI/EISA Bridge (PCEB) and the 82374EB/SB EISA System Component (ESC). The PCEB and ESC work in tandem to form the complete PCI/EISA bridge. Both the ISA and EISA-based systems are shown on the following pages.

The 82430NX PCIset consists of the 82434NX PCI/Cache Memory Controller (PCMC) and the 82433NX Local Bus Accelerator (LBX) components, plus, either a PCI/ISA bridge or a PCI/EISA bridge. For an ISA-based system, the 82430NX PCIset includes the 82378ZB System I/O (SIO) component as the PCI/ISA bridge. For the DP ISA based system, the 82430NX PCIset includes the 82379AB. For UP or DP EISA-based systems, the 82430NX PCIset includes the 82375EB/SB PCI/EISA Bridge (PCEB) and the 82374EB/SB EISA System Component (ESC).

This document describes both the 82430LX and 82430NX. Unshaded areas describe the 82434LX. Shaded areas, like this one, describe 82430NX operations that differ from the 82434LX.

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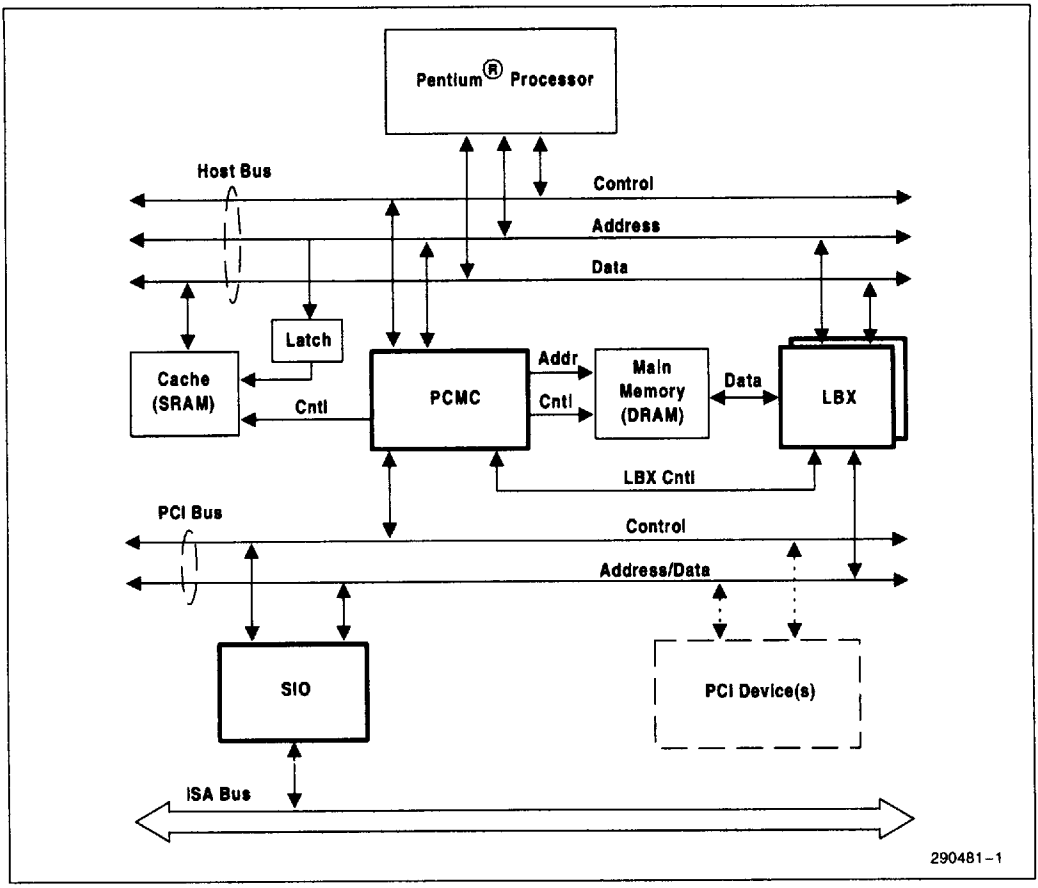
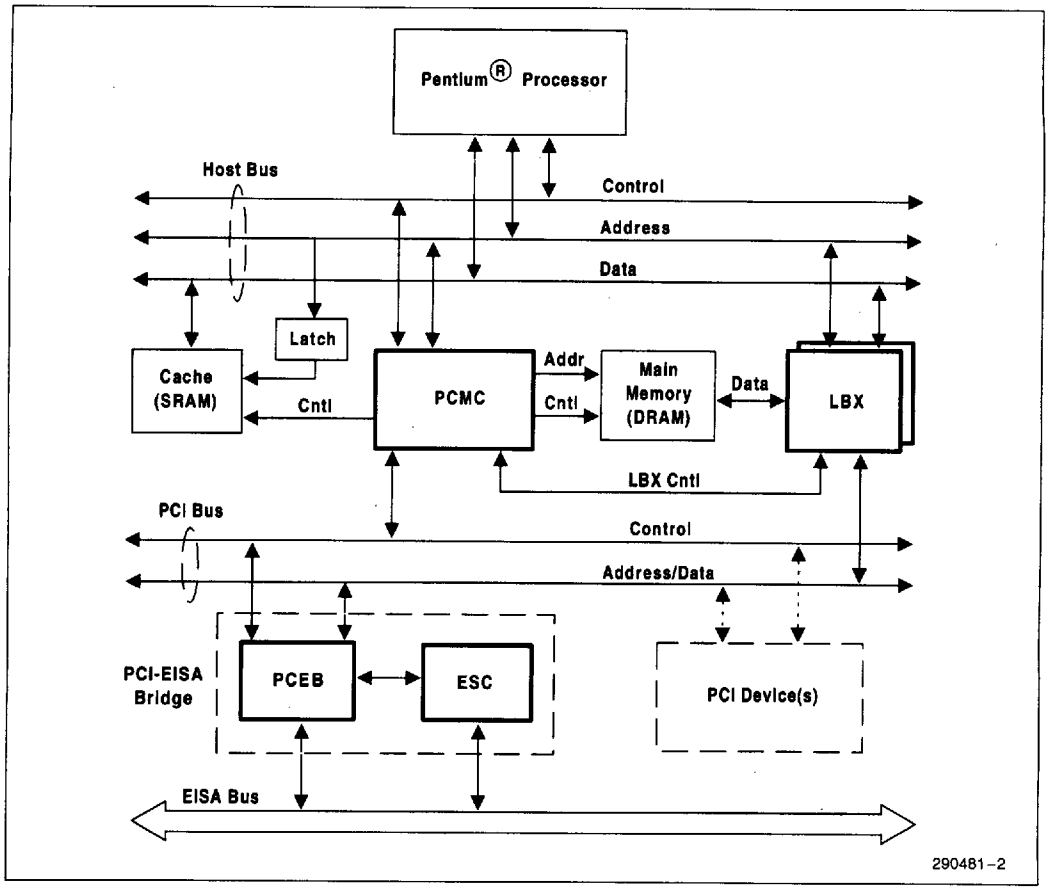


82430LX or 82430NX PCIset ISA Block Diagram



82430LX or Uni-Processor 82430NX PCIset EISA Block Diagram

The complete document for this product is available from Intel's Literature Center at 1-800-548-4725.

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