



82420/82430 PCiset BRIDGE COMPONENT

82378ZB (SIO), 82379AB (SIO.A) FOR ISA BUSES

- Provides the Bridge between the PCI Bus and ISA Bus
- 100% PCI and ISA Compatible
- Enhanced DMA Functions (82378ZB Only)
- Integrated Data Buffers to Improve Performance
- Integrated 16-bit BIOS Timer
- Arbitration for PCI Devices
- Arbitration for ISA Devices
- Integrates the Functionality of One 82C54 Timer
- Integrates the Functionality of Two 82C59 Interrupt Controllers
- Non-Maskable Interrupts (NMI)
- Four Dedicated PCI Interrupts
- Complete Support for SL Enhanced Intel486™ CPU's
- Integrated Power Management Support
 - System Management Interrupts
 - Fast Off Timer
 - STPCLK # Signal to Throttle CPU Clock
 - APM Port
- Provides I/O APIC for Dual-Processor (DP) Support

82374EB/SB (ESC), 82375EB/SB (PCEB) FOR EISA BUSES

- Provides the Bridge between the PCI Bus and EISA Bus
- 100% PCI and EISA Compatible
- Data Buffers Improve Performance
- Data Buffer Management Ensures Data Coherency
- Burst Transfers on both the PCI and EISA Buses
- 32-Bit Data Paths
- PCI and EISA Address Decoding and Mapping
- Programmable Main Memory Address Decoding
- Integrated EISA Compatible Bus Controller
- Supports Eight EISA Slots
- Provides Enhanced DMA Controller
- Provides High Performance Arbitration
- Integrates Support Logic for X-Bus Peripheral and more
- Integrates the Functionality of Two 82C59 Interrupt Controllers and Two 82C54 Timers
- Generates Non-Maskable Interrupts
- Provides BIOS Interface

The 82420/82430 PCiset Bridge components provide a bridge between the PCI to either EISA or ISA buses. The 82378 provides the bridge between PCI bus and the ISA bus while the 82374 and 82375 together provide the bridge between the PCI bus and the EISA bus.

The SIO integrates many of the common I/O functions found in today's ISA based PC systems. The SIO incorporates the logic for a PCI interface (master and slave), ISA interface (master and slave), enhanced seven channel DMA controller and support for other decode logic. The 82379AB adds an APIC for dual-processing Pentium™ Processor systems.

The complete documents for these products can be ordered by calling 1-800-548-4725. Ask for 290473 (ISA Bridge), 290520 (ISA-APIC Bridge), 290483 (EISA Bridge).

The 82374 EISA System Component (ESC) and 82375 PCI-EISA Bridge (PCEB) together provide the EISA system compatible master/slave functions on both the PCI Local Bus and the EISA Bus and the common I/O functions found in today's EISA systems. The ESC incorporates the logic for an EISA (master and slave) interface, EISA bus controller, enhanced seven channel DMA controller with Scatter-Gather support, EISA arbitration, 14 channel interrupt controller, five programmable timer/counters and non-maskable control logic. The ESC also integrates support logic to decode peripheral devices such as the Flash BIOS, Real Time Clock, Keyboard/Mouse Controller, Floppy Controller, two Serial Ports, one Parallel Port, and IDE Hard Disk Drive. The PCEB provides the address and data paths, bus controls, and bus protocol translation for PCI-to-EISA and EISA-to-PCI transfers. Extensive data buffering in both directions increases system performance by maximizing PCI and EISA Bus efficiency and allowing concurrency on the two buses. The PCEB integrates central bus control functions, PCI parity generation, system error reporting, and programmable PCI and EISA memory and I/O address space mapping and decoding.